



Lexington-Fayette Urban County Government

2013 COMPREHENSIVE PLAN

DIVISION OF PLANNING

Chapter 1

GOALS AND OBJECTIVES

PREAMBLE

To ensure that the urban growth boundary policies and other long range planning issues address the expected needs for new urban development and contribute to the prosperity of Lexington Fayette County, these goals and objectives have been drafted based upon the determined community needs of today with confidence that they will continue to be reviewed and revised as necessary.



Image 1.1



Mission Statement

The 2013 Comprehensive Plan seeks to provide flexible planning guidance to ensure that development of our community's resources and infrastructure preserves our quality of life, and fosters regional planning and economic development. This will be accomplished while protecting the environment, promoting successful, accessible neighborhoods, and preserving the unique Bluegrass landscape that has made Lexington-Fayette County the Horse Capital of the World.

GOALS AND OBJECTIVES

Theme A

Growing Successful Neighborhoods

Goal 1: Expand housing choices.

Objectives:

- a. Pursue incentives and regulatory approaches that encourage creativity and sustainability in housing development.
- b. Plan for housing that addresses the market needs for all of Lexington-Fayette County's residents, including, but not limited to, mixed-use and housing near employment and commercial areas.
- c. Plan for safe, affordable, and accessible housing to meet the needs of older and/or disadvantaged residents.
- d. Create and implement housing incentives that strengthen the opportunity for economic development, new business, and jobs, including, but not limited to higher density and housing affordability.

GOALS AND OBJECTIVES

Theme A

Growing Successful Neighborhoods

Goal 2: Support infill and redevelopment throughout the Urban Service Area as a strategic component of growth.

Objectives:

- a. Identify areas of opportunity for infill, redevelopment and adaptive reuse that respect the area's context and design features whenever possible.
- b. Implement innovative programs, such as the land bank, to facilitate sustainable development, including but not limited to, affordable housing and commercial and economic activity.
- c. Create materials that educate the public about infill and redevelopment.

Goal 3: Provide well designed neighborhoods and communities.

Objectives:

- a. Enable existing and new neighborhoods to flourish through improved regulation, expanded opportunities for neighborhood character preservation, and public commitment ot expanded options for mixed-use and mixed-type housing throughout Lexington-Fayette County.
- b. Strive for positive and safe social interactions in neighborhoods, including, but not limited to, neighborhoods that are connected for pedestrians and various modes of transportation.
- c. Minimize disruption of natural features when building new communities.
- d. Promote, maintain, and expand the urban forest in existing neighborhoods.

GOALS AND OBJECTIVES

Theme B

Protecting the Environment

Image 1.2



Goal 1: Continue to implement the Consent Decree, including the capacity assurance program, as directed by the Environmental Protection Agency.

Goal 2: Reduce Lexington-Fayette County's carbon footprint.

Objectives:

- a. Implement the adopted environmental policy.
- b. Anticipate the community's needs by encouraging environmentally sustainable uses of natural resources.
- c. Provide incentives for green building, sustainable development, and transit-oriented development with civic agencies leading by example through the use of green building standards.

GOALS AND OBJECTIVES

Theme B

Protecting the Environment

Goal 3: Support the funding, planning, and management of a green infrastructure program.

Objectives:

- a. Identify and protect natural resources and landscapes before development occurs.
- b. Incorporate green infrastructure principles in new plans and policies, including, but not limited to, land use and transportation.



GOALS AND OBJECTIVES



Theme C

Creating Jobs and Prosperity

Goal 1: Support and showcase local assets to further the creation of a variety of jobs.

Objectives:

- a. Strengthen efforts to develop a variety of job opportunities that lead to prosperity for all.
- b. Strengthen regulations and policies that propel the agricultural economy, including, but not limited to, local food production and distribution, agritourism, and the equine industry that showcase Lexington-Fayette County as the Horse Capital of the World.
- c. Collaborate with institutions of higher learning to foster a capable and skilled workforce while engaging agencies that address the lack of prosperity for residents by reducing joblessness.
- d. Foster the success and growth of large employment sectors; protect and provide readily available economic development land to meet the needs for jobs; and enable infill and redevelopment that creates jobs where people live.
- e. Encourage the development of appropriate attractions and supporting uses that promote and enhance tourism.

Goal 2: Attract the world's finest jobs, encourage entrepreneurial spirit, and enhance our ability to recruit and retain a talented, creative workforce by establishing opportunities that embrace diversity with inclusion in our community.

Objectives:

- a. Identify and promote sectors of the economy that will flourish in Lexington-Fayette County.
- b. Improve opportunities for small business development and workers who rely on personal technology.
- c. Review and improve regulations and policies that attract and retain high paying jobs through close collaboration with agencies that focus on economic development.
- d. Provide entertainment and other quality of life opportunities that attract young professionals and a workforce of all ages and talents to Lexington.

GOALS AND OBJECTIVES



Theme D

Improving a Desirable Community

Goal 1: Work to achieve an effective and comprehensive transportation system.

Objectives:

- a. Support the Complete Streets concept which includes, but is not limited to, the design and use of the right-of-way for cars, bicycles, and pedestrians.
- b. Develop a viable network of accessible transportation alternatives for residents and commuters, which may include the use of mass transit, bicycles, walkways, ridesharing, greenways, and other strategies.
- c. Improve traffic operation strategies.

Goal 2: Provide for accessible community facilities and services to meet the health, safety and quality of life needs of Lexington-Fayette County's residents and visitors.

Objectives:

- a. Encourage public safety and social sustainability by supporting Secured by Design concepts and other policies and programs for the built environments of neighborhoods to help reduce opportunities for crimes.
- b. Collaborate with educational and healthcare entities to meet the needs of Lexington-Fayette County's residents and visitors.

GOALS AND OBJECTIVES

Theme D

Improving a Desirable Community

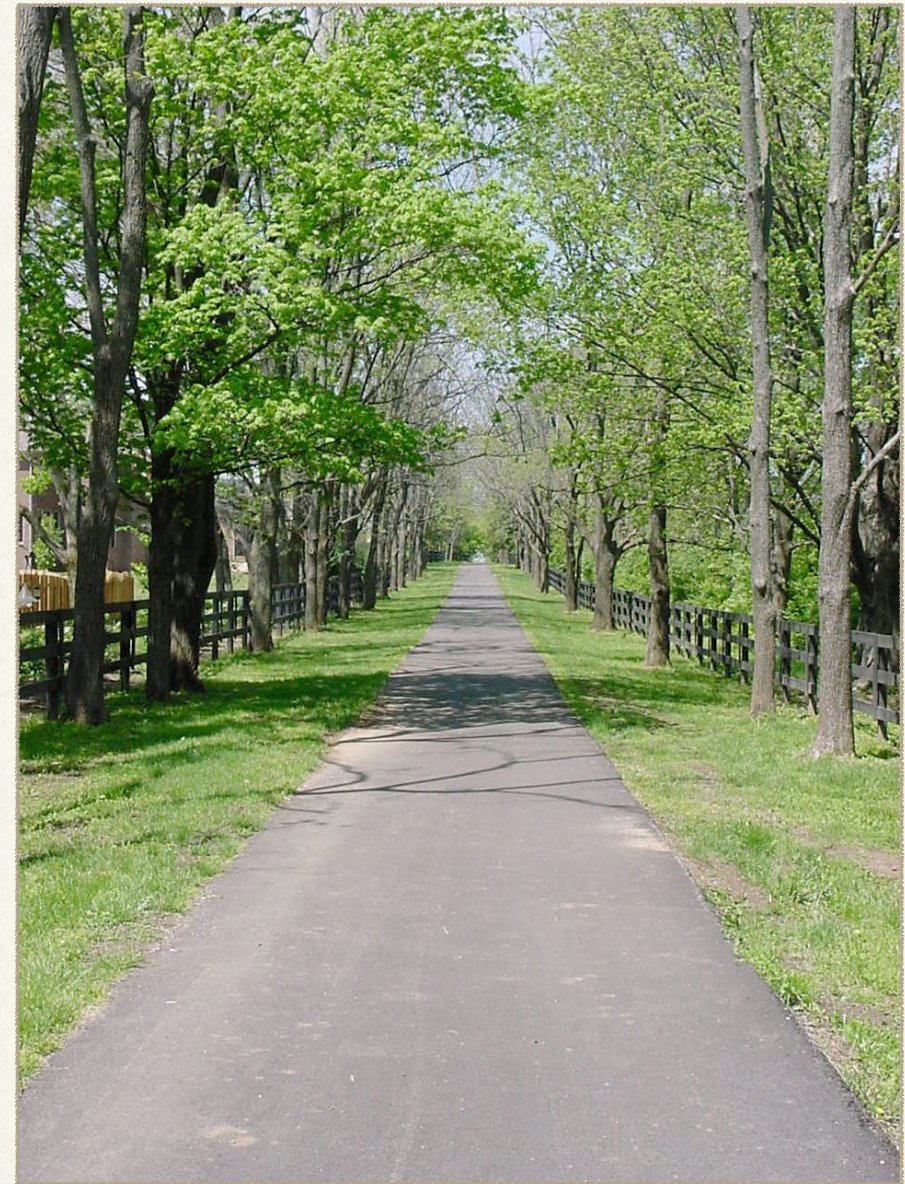
Goal 3: Protect and enhance the natural and cultural landscapes that give Lexington-Fayette County its unique identity and image.

Objectives:

- a. Protect historic resources and archeological sites.
- b. Incentivize the renovation, restoration, development, and maintenance of historic residential and commercial structures.
- c. Develop incentives to retain, restore, preserve and continue use of historic sites and structures, rural settlements, and urban and rural neighborhoods.

Goal 4: Promote, support, encourage, and provide incentives for public art.

Image 1.3



GOALS AND OBJECTIVES



Theme E

Maintaining a Balance between Planning for Urban Uses and Safeguarding Rural Land

Goal 1: Uphold the Urban Services Area concept.

Objectives:

- a. Continue to monitor the absorption of vacant and underutilized land within the Urban Service Area.
- b. Encourage compact, contiguous, and/or mixed-use sustainable development within the Urban Service Area, as guided by market demand, to accommodate future growth needs.

Goal 2: Support the agricultural economy, horse farms, general agricultural, and the character of the Rural Service Area.

Objectives:

- a. Update, reaffirm, and readopt the Rural Service Area Land Management Plan to continue as the community's framework for preserving and enhancing rural resources.

- b. Protect and enhance the natural, cultural, historic, and environmental resources of Lexington-Fayette County's Rural Service Area and Bluegrass farmland to help promote the general agricultural brand and ensure Lexington-Fayette County remains the Horse Capital of the World.
- c. Support the Purchase of Development Rights and private sector farmland conservation programs to protect, preserve and enhance our signature agricultural industries, historic structures, cultural landscapes, natural environments, and community welfare.

Goal 3: Maintain the current boundaries of the Urban Service Area and Rural Activity Centers; and create no new Rural Activities Centers.

GOALS AND OBJECTIVES



Theme F

Implementing the Plan for Lexington-Fayette County and the Bluegrass

Goal 1: Engage the residents of Lexington-Fayette County in the planning process.

Objectives:

- a. Pursue all avenues of communication, including, but not limited to, electronic and social media to involve residents.
- b. Establish early and continuous communication with residents.
- c. Develop a network of diverse contacts and a means to engage them.
- d. Collaborate with other agencies in Lexington-Fayette County to meet local standards in order to achieve compatible developments and accomplish the community's vision as articulated in *Destination 2040*.

Goal 2: Implement the 2013 Comprehensive Plan

Objectives:

- a. Develop and update a work program for the 2013 Comprehensive Plan that can be measured and analyzed.
- b. Provide an annual public report about the progress of implementation.

Goal 3: Increase regional planning.

Objectives:

- a. Set the standard through leadership and engagement to identify and resolve regional issues.
- b. Support legislative efforts and cross-border actions that improve regional planning, including, but not limited to, developing regional policies; sharing information; and planning for regional systems of transportation, open space, water supply, and infrastructure.

Chapter 2

STATEMENTS, POLICIES AND DATA

COMPREHENSIVE PLANNING IN LEXINGTON

Comprehensive planning is a longstanding community tradition in Lexington, dating to the first plan in 1931. Over the years, the comprehensive plans have served as a source of inspiration and direction for managing growth and improving quality of life for the residents of Lexington-Fayette County. While the basic rules for comprehensive planning are codified in Kentucky statutes, Lexington has come to expect standards of achievement beyond the basics. The comprehensive planning process, therefore, is deliberate and intensive in its openness to public outreach and input, research and analysis, and incorporation of both cutting edge and evergreen practices for the management of community growth and preservation.



STATEMENTS, POLICIES, AND DATA

The essentials of comprehensive planning require the Planning commission to prepare a comprehensive plan to serve as a guide for public and private actions and decisions to assure the development of property in the most appropriate relationships. In most cases, communities are directed to look as far into the future as is reasonable when crafting the elements of a comprehensive plan.

With shared responsibility for adopting the goals and objectives, the Planning Commission and Urban County Council develop a vision that serves as the guide for the physical development and economic and social well-being of Lexington. The goals and objectives act as the guide for the preparation and adoption of the remaining elements of the comprehensive plan.

While comprehensive plans are designed as long-term visions, they must also be current and relevant, which is why they are reviewed at least once every five years in light of social, economic, technical, and physical advancements or changes. The Planning Commission has amended previous comprehensive plans between five-year reviews through the process of small area planning. Targeted area for small area plans are usually identified in the comprehensive plan and are carried out as implementation tasks.

Lexington's most important planning legacy is its urban growth boundary, established in 1958 and recognized as a National Historic Planning Landmark. Over the years, the boundary has been adjusted following a process of evaluation and public input in anticipation of community growth needs. Lexington's urban growth boundary, along with other foundational issues such as road and greenway planning, infill policies, and land uses, contribute to a certainty of process for residents and property owners.

*Comprehensive Planning is guided by Kentucky
Revised Statute, Chapter 100.183*

~

*Lexington's first Comprehensive Plan was in
1931.*

~

*The 1996 Comprehensive Plan added 5,400
acres to the Urban Service Area, which was the
last time the USA was expanded.*

STATEMENTS, POLICIES, AND DATA

QUICK NUMBERS	
305,489	Population of Fayette County - 2012
291,289	Population of Urban Service Area (95%)
14,200	Population of Rural Service Area (5%)
182,761	Acres in Fayette County
285.56	Square miles in Fayette County
54,634	Acres in Urban Service Boundary (30%)
85.366	Square miles in USA
128,127	Acres in Rural Service Area (70%)
200.194	Square miles in RSA
Population Density	
54,634	Acres in Urban Service Area
5.3	People per acre in the USA
3,412	People per square mile in the USA
26,136	Acres of USA residential zoning
11.1	People per acre on residential land
7,132	People per residential square mile
Source: U.S. Census Bureau, LFUCG	

POPULATION CAPACITY	
Opportunities	Estimate
Vacant Residential Land	38,314
Vacant Housing Units	31,610
I/R Residential	10,000
Total	79,924
Population Estimates and Projections	
Year	Total
2010 (Census)	295,803
2012	305,489
2020	334,733
2025	355,224
2030	375,986
Estimated population capacity of USA	375,727
Estimated time to reach capacity of USA	12-17 Years
Source: U.S. Census Bureau, Ky State Data Center, LFUCG	

STATEMENTS, POLICIES, AND DATA

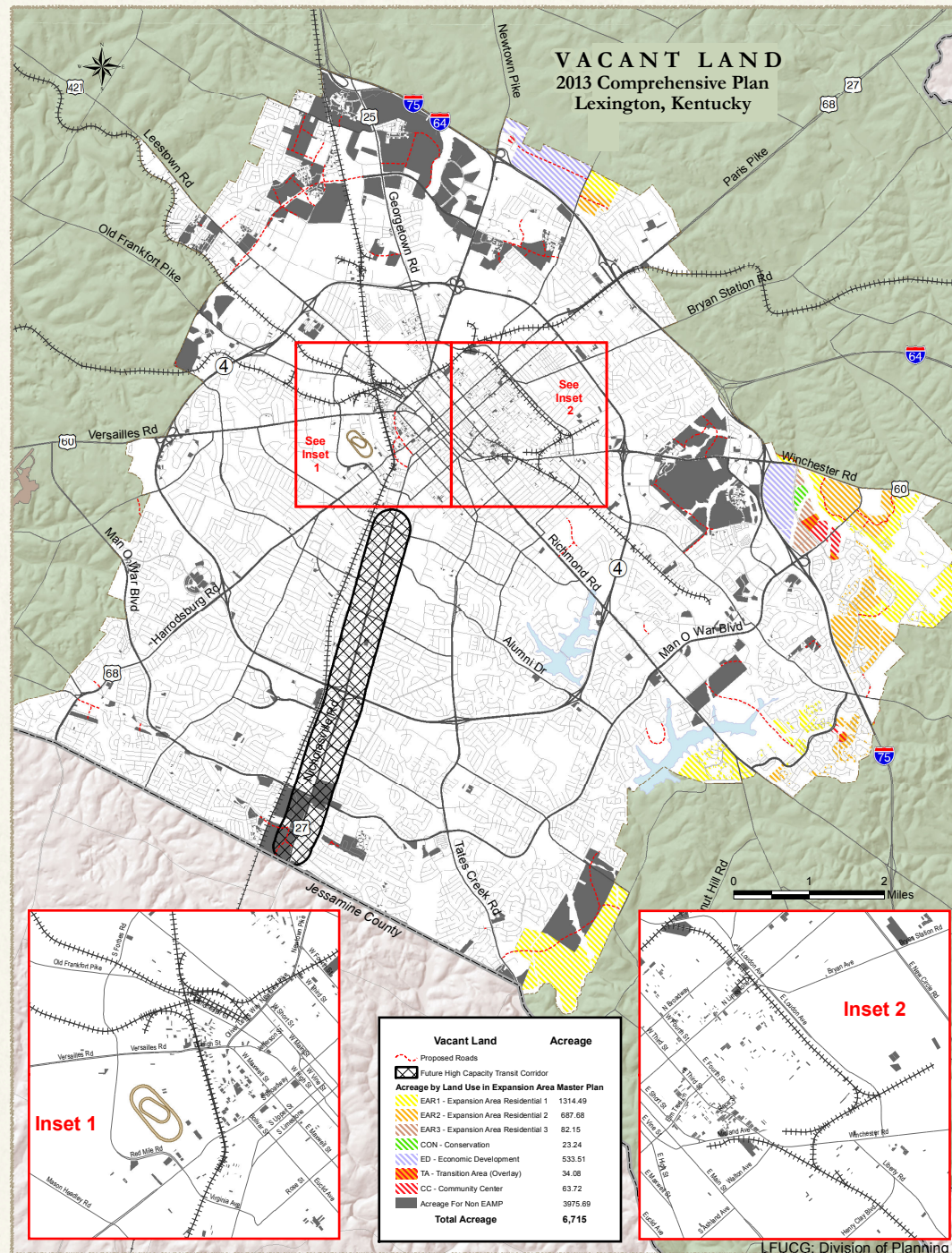
	LAND ABSORPTION FROM 2007 COMPREHENSIVE PLAN		LAND ABSORPTION PROJECTIONS 2013 COMPREHENSIVE PLAN			
	6 Year Average 2000-2005		5 Year Average 2006-2010		11 Year Average 2000-2010	
Land Use Category	Acres Absorbed per Year	Years Remaining	Acres Absorbed per Year	Years Remaining	Acres Absorbed per Year	Years Remaining
Residential	631	9	185	24	398	11
Employment	147	15	41	36	136	11
Other	102	10	52	14	54	13
Total	880		278		588	
Source: LFUCG						

VACANT LAND AS OF JANUARY 1, 2011	
Residential	4,506 acres
Employment	1,491 acres
Other	718 acres
Total	6,715 acres
Note: The 2010 vacant land analysis deducted 866 acres of floodplain, greenspace, and other land that cannot be developed. These lands had been included in previous years' analysis.	
Source: LFUCG	

HOUSING IN LEXINGTON	
136,197	Total Housing Units
122,746	Occupied Housing Units
13,451	Vacant Housing Units
9.9%	Housing Vacancy Rates
82,399	Single-Family Units, detached(60.5%)
6,265	Single-Family Units, attached(4.6%)
6,810	Duplexes(5%)
40,723	Apartments and Condominiums(29.9%)
70,899	Owner-occupied Homes
\$163,400	Median Value of Owner-occupied Homes
\$725	Median Monthly Rent
49.7%	Housing Heated by Gas
48.8%	Housing Heated by Electricity
Source: LFUCG	

STATEMENTS, POLICIES, AND DATA

Map 2.1 Vacant Land



Accessibility

The 2013 Comprehensive Plan meets accessibility head on in the Goals and Objectives {A.1.c., D.1.b., and D.2} and throughout the Plan to state without question that Lexington will strive to be a city that is accessible to all people in all areas of our community. While we will achieve the standards set by federal regulations such as the Americans with Disabilities Act, and any other related regulations, we also value and intend to accommodate all of our citizens beyond what is required and set Lexington apart as one that welcomes all people to our city.

Our accessibility can be more fully realized through the following policies and strategies:

- ❖ Establish an objective and standardized process to evaluate new developments, redevelopments, and site plans for accessibility
- ❖ Create development regulations that will ensure accessibility within developments
- ❖ Ensure accessibility to adjoining neighborhoods, transit stops, public facilities, and destinations by connecting buildings and housing to the street sidewalk network
- ❖ Increase accessibility for pedestrians and persons with disabilities by developing street design standards for wider sidewalks wherever possible and ensuring that curb ramps take pedestrians across the street and not into the intersection
- ❖ Ensure that park and greenway locations are accessible

STATEMENTS, POLICIES, AND DATA

DISABILITY CHARACTERISTICS IN FAYETTE COUNTY		
	Total Residents	With a Disability*
Total Non-institutionalized population	296,024	32,691
Population birth to 17 years		2,061
Hearing difficulty		206
Vision Difficulty		193
Cognitive Difficulty		1,773
Ambulatory Difficulty		75
Self Care difficulty		381
Population 18 and over	232,845	30,630
Hearing difficulty		7,456
Vision Difficulty		4,869
Cognitive Difficulty		11,409
Ambulatory Difficulty		17,567
Self Care Difficulty		6,324
Independent Living Difficulty		10,406
Gender		
Male	144,509	14,219
Female	151,515	18,472
Source: 2011 American Community Survey 1-year Estimates		
*People may self-report more than one disability		

LOCATION	LACK OF PHYSICAL ACTIVITY	OVERWEIGHT	OBESE	DIABETES
Fayette County	23%	64%	23%	6%
Jefferson County	27%	62%	27%	8%
Kentucky	31%	64%	27%	8%
Source: BRFSSD www.kentuckyhealthfacts.org				

Community Facilities

A desirable community must possess quality public and semipublic services, including: fire and police protection, public schools, libraries and hospitals, parks and recreation, and utilities. In all instances, particularly where public accommodation is crucial, community facilities should be accessible to all citizens.

Parks and Recreation

The Centers for Disease Control and Prevention together with the University of Kentucky's College of Public Health and Markey Cancer Center Control Program jointly evaluated the [Behavioral Risk Factor Surveillance System Data](#). The data show that 23 percent of adults in Lexington do not exercise or have meaningful physical activity. Associated problems of being overweight, obesity, and diabetes could be mitigated through the use of public parks for physical activity.

The 2009 LFUCG Comprehensive Parks and Recreation Master Plan Update recommended changes to programming and services and a list of park development priorities. Consistent throughout all priorities is

STATEMENTS, POLICIES, AND DATA

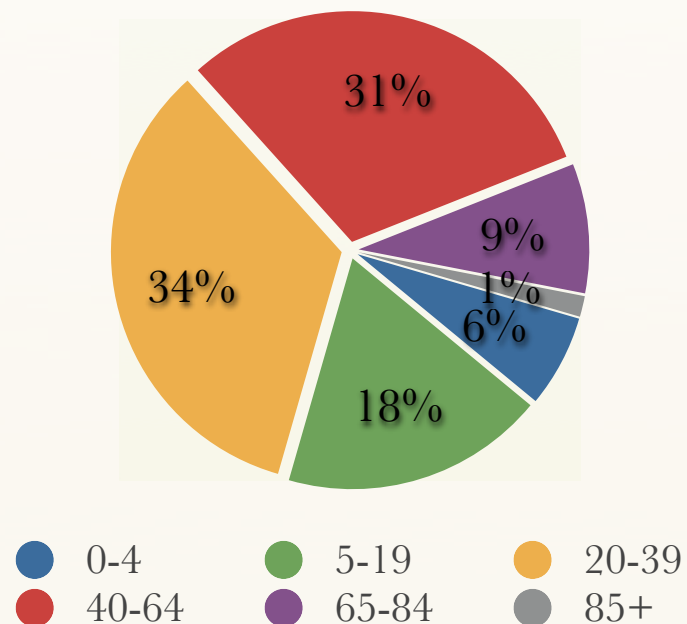
POPULATION DEMOGRAPHICS AND PROJECTIONS											
Geographic Area	Census 2000	Census 2010	2010 Demographics			Pop. Increase from 2000 to 2010	Population Projections				
			Median Age	Pop. 65 and Older	Average Household size		2015	2020	2025	2030	2035
Kentucky	4,041,769	4,339,367	38	578,227	2.45	7%	4,509,429	4,672,754	4,820,390	4,951,178	5,063,331
Bourbon County	19,360	19,985	41	3,049	2.48	3%	20,303	20,530	20,687	20,753	20,702
Clark County	33,144	35,613	40	5,046	2.46	7%	36,892	37,985	38,836	39,423	39,756
Fayette County	260,512	295,803	34	31,138	2.30	14%	315,249	334,733	355,224	375,986	396,970
Jessamine County	39,041	48,586	36	5,494	2.65	24%	53,645	58,928	63,999	68,933	73,722
Madison County	70,872	82,916	34	9,312	2.42	17%	89,055	95,333	101,543	107,665	113,562
Scott County	33,061	47,173	35	4,367	2.63	43%	55,038	63,984	73,133	82,497	91,779
Woodford County	23,208	24,939	41	3,241	2.51	7%	25,943	26,817	27,496	27,972	28,151
Sources: 2000 and 2010 U.S. Census Bureau; Kentucky State Data Center population projections (Sept. 2011)											

STATEMENTS, POLICIES, AND DATA

POPULATION BY AGE RANGE AND 2035 PROJECTIONS				
	2000 Census	2010 Census	2035 Pop. Projection	Increase from 2010 to 2035
All Persons	260,512	295,803	396,970	101,167
0-4	16,146	19,145	25,277	6,132
5-19	49,080	54,652	72,290	17,638
20-39	94,274	100,255	129,576	29,321
40-64	74,838	90,613	108,602	17,989
65-84	23,039	26,835	53,950	27,115
85+	3,135	4,303	7,275	2,972
Source: U.S. Census Bureau and Kentucky State Data Center population projections				

HOW PEOPLE GET TO WORK IN LEXINGTON				
	2000	%	2011	%
Drive alone	109,277	79%	119,237	79%
Carpooled	15,324	11%	13,503	9%
Bus or trolley bus	1,590	1%	3,114	2%
Taxi, motorcycle or other	873	1%	893	1%
Bicycle	778	1%	2,788	2%
Walk	5,513	4%	5,155	3%
Work at Home	3,438	3%	6,081	4%
Source: U.S. Census Bureau				

2010 Population by Age Range



STATEMENTS, POLICIES, AND DATA

POPULATION BY RACE AND HISPANIC ORIGIN				
	2000	2010	Increase	% Increase
Total Population	260,512	295,803	35,291	13.5%
White alone	206,174	216,072	9,898	4.8%
Black or African American alone	34,876	42,336	7,460	21.4%
American Indian and Alaska Native alone	457	599	142	31.1%
Asian alone	6,360	9,506	3,146	49.5%
Native. Hawaiian and Other Pacific Islander alone	80	107	27	33.8%
Some Other Race Alone	470	546	76	16.2%
Two or More Races	3,534	6,163	2,629	74.4%
Hispanic and of White Race Alone	4,946	7,927	2,981	60.3%
Hispanic and Black or African American Race Alone	240	636	396	165.0%
Hispanic and of Same Other Race or Combination of Races	3,375	11,911	8,536	252.9%
Source: U.S. Census Bureau				

STATEMENTS, POLICIES, AND DATA

development of the greenway system. The greenway system not only provides opportunity for active and passive recreation but also pedestrian/bicycle linkage to the parks and their facilities.

As the remaining vacant land and infill opportunities are developed in Lexington, we should continue to address current neighborhood and community park needs and keep pace with new demands.

Rural Parks

There are nine rural parks, two owned and maintained by the Commonwealth, and seven owned and maintained by LFUCG. The Kentucky Horse Park and Masterson Station and Hisle Parks are either totally or partially dedicated to equine activities.

The LFUCG rural parks include:

- * **Raven Run Nature Sanctuary: 732 acres**
- * **Masterson Station Park: 660 acres.** Located outside the Urban Service Boundary, Masterson Station is heavily used by the adjoining neighborhoods and the community. It includes equine facilities, a playground, trails, dog park, soccer complex, and a site for the annual Bluegrass Fair and Stock Dog Trial.
- * **Hisle Park: 280 acres.** A [master plan](#) was developed for Hisle Park, which was gifted to the Urban County Government. The plan calls for limited impervious development and conservation of its woods, pond, and riparian stream bank. Activities include equine trails, archery, gardening, birding, and other outdoor educational/recreation
- * **Athens Ball Field Complex: 15 acres**
- * **Model Airplane Facility at former landfill: 7 acres**

* **Kearney Links Golf Course: 200 acres**

* **Donaldson Park at Valley View Ferry: 0.7 acres**

The State parks include:

- * **Boone Station State Historic Site: 44 acres**, where Daniel Boone and his family lived for 10 years. It has a self guided trail and picnic tables.
- * **Kentucky Horse Park: 1,185 acres**, home to major museums, events, competitions, conventions, campgrounds, and national equine organizations.

Cell Towers

Since 2002, the Planning Commission has had the authority to regulate the location of cell towers. In order to maximize negative visual effects of cell towers, co-location of antennae should be encouraged for each site. Where possible, existing structures and facilities that meet the requirements of the proposed installation should be used (water towers, church steeples, radio and television towers, tall buildings, commercial signs, and others). Cell towers should not be sited in a location that might have an adverse effect on public health, safety and welfare, or might alter the essential character of an adjoining area. The Planning Commission, when asked to consider the potential location of a new cell tower site, should review all pertinent information related to existing tower locations and the potential impacts of new towers.

To the largest extent possible, cellular service providers are encouraged to site their facilities on government-owned properties, if these properties are appropriate in light of surrounding land uses. Whenever possible, cell towers should be sited at locations that minimize their

STATEMENTS, POLICIES, AND DATA

adverse effect on residential uses in the immediate area and do not create dead zones for public safety radio systems. Only when no other adequate site is available should a new cell tower deployment be permitted in a residential zone. Cell towers should not be sited on environmentally sensitive lands, in or within 1,200 feet of an historic district or landmark, or along scenic byways, unless the applicant proves that no other reasonable site is available and the tower is

How do Community Facilities improve Lexington?

- ✦ Provide emergency services, medical care, police protection, and government services
- ✦ Provide education, community meeting places, training and recreation
- ✦ Provide drinking water and other utilities

What does the 2013 Comprehensive Plan recommend?

- ✦ Relocate three fire stations and build two new ones
- ✦ Relocate the Police Training Academy to the new campus of the Bluegrass Community and Technical College, and other facility developments.
- ✦ Support the Fayette County Public School proposal to build two new high schools, one new middle school, and four new elementary schools
- ✦ Implement changes to Parks and Recreation programming and services and develop the greenway system

designed to minimize impact. Review of the proposals submitted to the Planning Commission should include consideration of the impact of the proposed tower on the surrounding land uses. More intrusive type of towers may be confined to office, commercial, warehouse, and industrial zones. In all cases, adequate and appropriately designed fencing and landscaping should be provided if sufficient screening does not exist.

Fire Protection

Fire Protection is provided from 23 fire stations, which comprise the [Division of Fire and Emergency Services](#). Four of the 23 stations are located in the Rural Service Area. The newest stations are Veterans Park (Station 22) and Bluegrass Station (Station 23), both opened in 2005.

Different types of equipment and specially trained staff serve each of the 23 stations, with seven stations assigned ladder trucks. Of these seven, the 95-foot elevated platform tower ladder units are housed at Woodland Avenue (Station 5) and Veterans Park (Station 22). Ladder units at East Third Street (Station 1), East New Circle Road (Station 2), Beaumont (Station 20), and Hamburg (Station 21) house 105-foot trucks, while Finney Street (Station 10) houses a 100-foot truck. Merino Street (Station 3) is the home of the department's heavy rescue company and is the only station that does not house an engine company. At present time, nine of the existing stations also house emergency care units, with the tenth ECU scheduled to be commissioned at Station 3 in 2013. The location of these units is based on analysis of run volume, response time, and development trends.

STATEMENTS, POLICIES, AND DATA

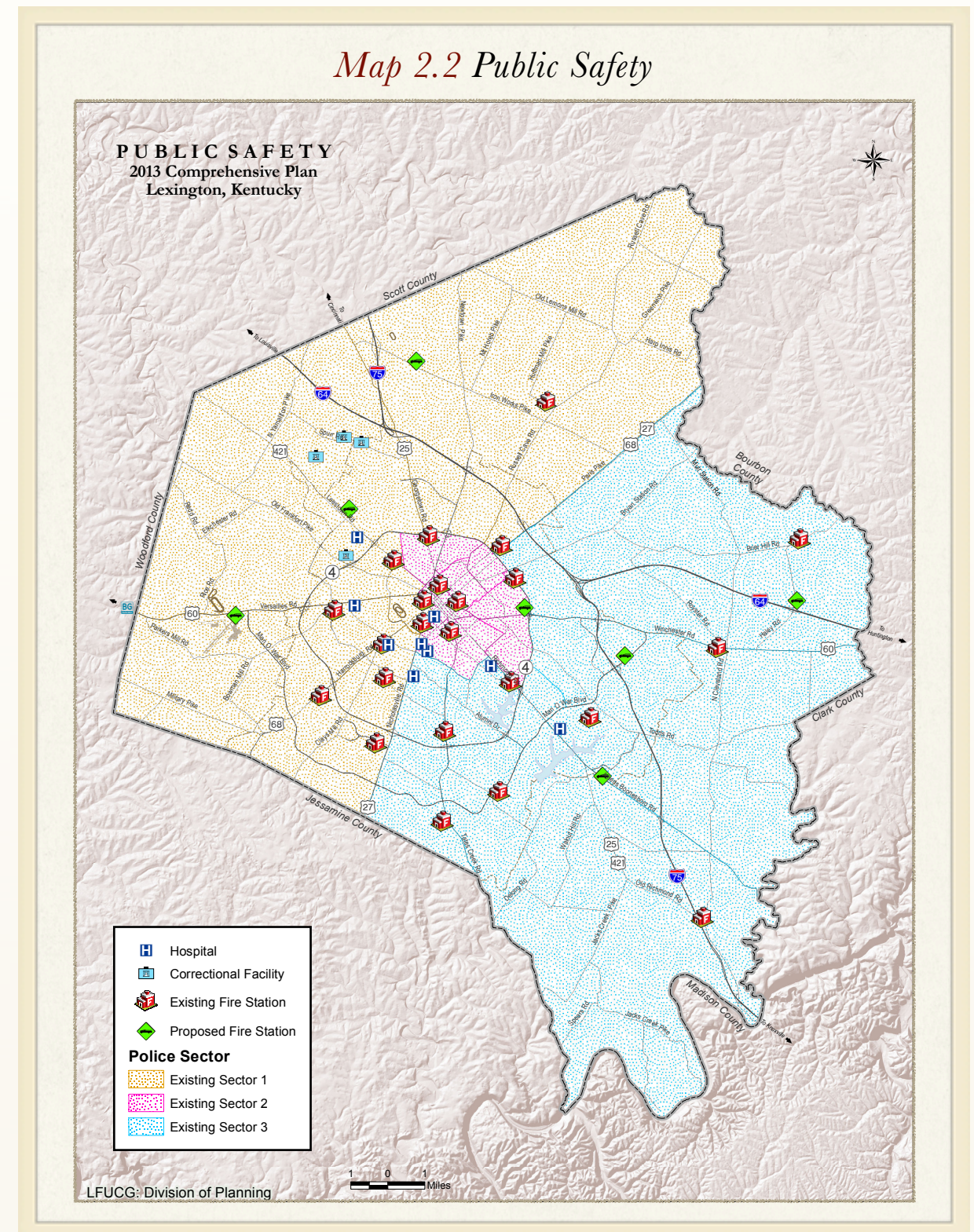
Besides faster response to emergencies, a sufficient supply of fire station, equipment, and personnel may lead to reduced insurance costs households and businesses. Service area standards for engine companies are 1.5 road miles from the station and 2.5 miles for ladder companies. A connected street system enables fire stations that can serve more area. The city of Charlotte, North Carolina found that in areas with connected streets, there was less need to build fire stations because of the better coverage.

Based on growth trends in the community and national response guidelines, the Division of Fire and Emergency Services recommends new fire stations to minimize response times, provide the highest quality of service, and maximize property insurance savings for the rate payers. The new fire stations are proposed for:

- ❖ Sandersville Road and Citation Boulevard (Station 24)
- ❖ Relocation of Station 2 to Eastland Drive and Murray Drive
- ❖ Relocation of Station 17 to the Polo Club Boulevard and Winchester Road area
- ❖ Relocation of Station 19 to the Ironworks Pike and Berea Road area
- ❖ South of Hays Boulevard between Athens Boonesboro and I-75

The Division of Fire and Emergency Services works closely with Kentucky-American Water Company to ensure that an adequate water supply for fire suppression is available. KAWC regularly evaluates and improves the system to ensure adequate fire flow and installs public fire hydrants to comply with the Division of Fire and Emergency Services requirements.

Fire protection for higher residential densities and taller buildings is



STATEMENTS, POLICIES, AND DATA

addressed with ladder and platform bucket trucks that can reach up to seven floors. Building codes, such as sprinkler systems and building design materials augment fire protection.

The location of **future stations** requires careful planning to ensure that appropriate property is acquired. The Division of Planning, Division of Fire and Emergency, and other LFUCG divisions work closely to determine the need for expanded fire protection services and to maximize the benefit to local neighborhoods when locating a new facility.

Police Protection

The services and supporting function of the Division of Police take many forms and are coordinated through the Office of the Chief of Police and four bureaus in the Division of Police. Perhaps most noticeable to Lexington's residents and visitors are the Bureaus of Patrol and Special Operations.

The Bureau of Patrol is the largest and most visible portion of uniformed officers. Patrol officers respond to calls for service in the community. Officers report for duty at one of the following neighborhood locations:

- * West Sector and 1795 Old Frankfort Pike
- * Central Sector at 1060 Goodwin Drive
- * East Sector at 1165 Centre Parkway

Sectors are further divided into smaller geographic beats where officers are assigned.

The Bureau of Special Operations is responsible for the Community

Law Enforcement and Response (CLEAR) Unit, where officers are assigned to designated neighborhoods to aid in prevention and reduction of crime. CLEAR officers work with other government entities and neighborhood residents to address and correct issues in their assigned areas. Additional special operations include the Division of Police Traffic Section, Mounted Unit, Canine Unit, School Liaison Unit, Community Services Unit, Hazardous Devices Unit, Emergency Response Unit, and Air Support Unit.

The of Division of Police maintains a multi-year plan, which outlines the agency's long-term planning goals. The **2012-2014 Multi-Year Plan** includes objectives regarding facility development, including plans to relocate the Training Academy to the new campus of the Bluegrass Community and Technical College at West Fourth Street and Newtown Pike. The transition to the new facility will begin in the fall of 2013.

Correctional Centers

There are four correctional facilities in Lexington: Federal prison, state facilities for adults for juveniles, and the Lexington-Fayette Urban County Government detention center. All four are located in the northwestern portion of Fayette County, with three in the rural area around the perimeter of Masterson Station Park. The LFUCG facility is in the urban service area.

Garbage and Waste

At a rate of 1.05 tons of waste generated per person per year, the citizens of Lexington will generate 1,660,108 tons of waste from 2010 to 2015. To manage the garbage and waste, the [Division of Waste](#)

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DETENTION FACILITIES		
Facility	Address	Acres
Federal Medical Center	3301 Leestown Road	302
Blackburn Correctional Complex	3111 Spurr Road	418
Fayette Regional Juvenile Detention	3475 Spurr Road	14
Fayette County Detention	600 Old Frankfort Circle	71

Management provides once-a-week curbside residential service for refuse, recyclable materials, yard waste, and bulky items for 85 percent of Fayette County residents. The remainder is collected by private services. The Division of Waste Management is considering a variety of options to divert more debris from landfills. As a pilot program, the Division of WM has been collecting food waste in a neighborhood of about 400 homes and 20 different businesses and schools including Good Foods Co-op, Lexmark, Lafayette High School, and Whole Foods Market. The food waste is placed in the yard waste containers and composted into mulch, along with grass clippings and tree limbs.

Waste that is not recycled or composted is transported by trucks to landfills, most of which are in other counties:

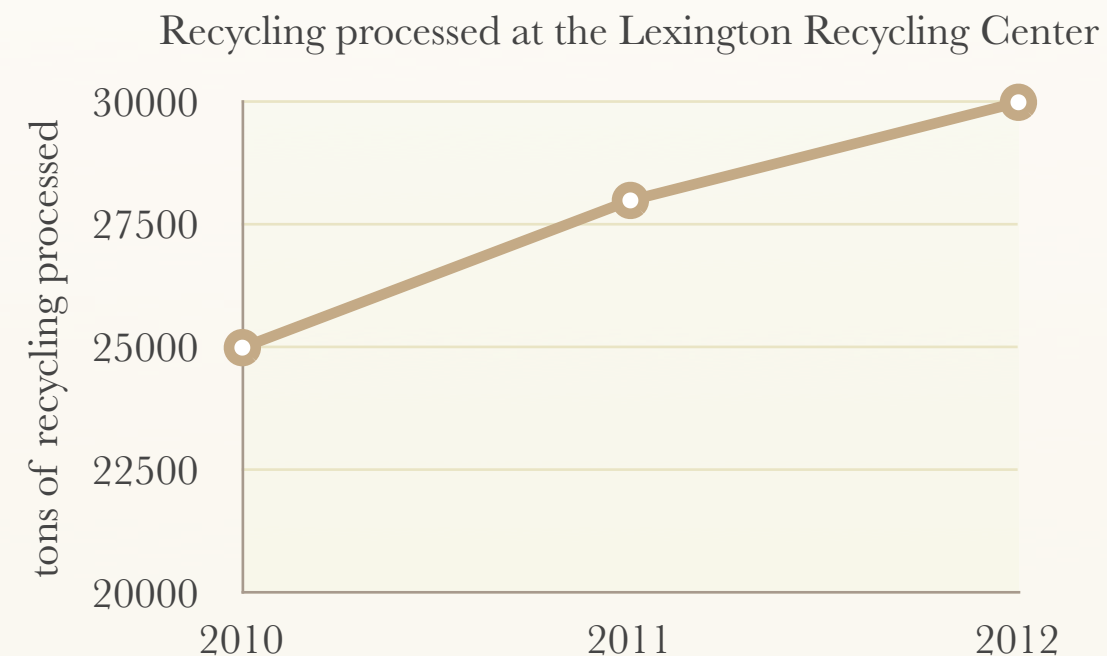
- * Benson Valley Area Landfill, Frankfort
- * Veolia ES, Blue Ridge Recycling and Disposal Facility, Winchester
- * Veolia ES, Morehead Landfill, Morehead
- * Montgomery County Landfill - Rumpke, Jeffersonville

- * Tri-K Landfill, Inc, Stanford
- * Thoroughbred Landfill, Lexington (construction and demolition debris only)
- * Central Kentucky Landfill, Georgetown
- * Pendleton County Landfill, Butler

In 2011, all the LFUCG refuse fleet began using biodiesel fuel. In summer 2012, the Division of Waste Management purchased two electric trucks to collect recyclables and waste from downtown containers.

Old Frankfort Pike Landfill

Lexington's former urban landfill on Old Frankfort Pike was in use from the 1940s through 1977. The landfill, which is now capped and closed, covers more than 50 acres and is located adjacent to the Town Branch Wastewater Treatment Plant. Water leachate from the landfill



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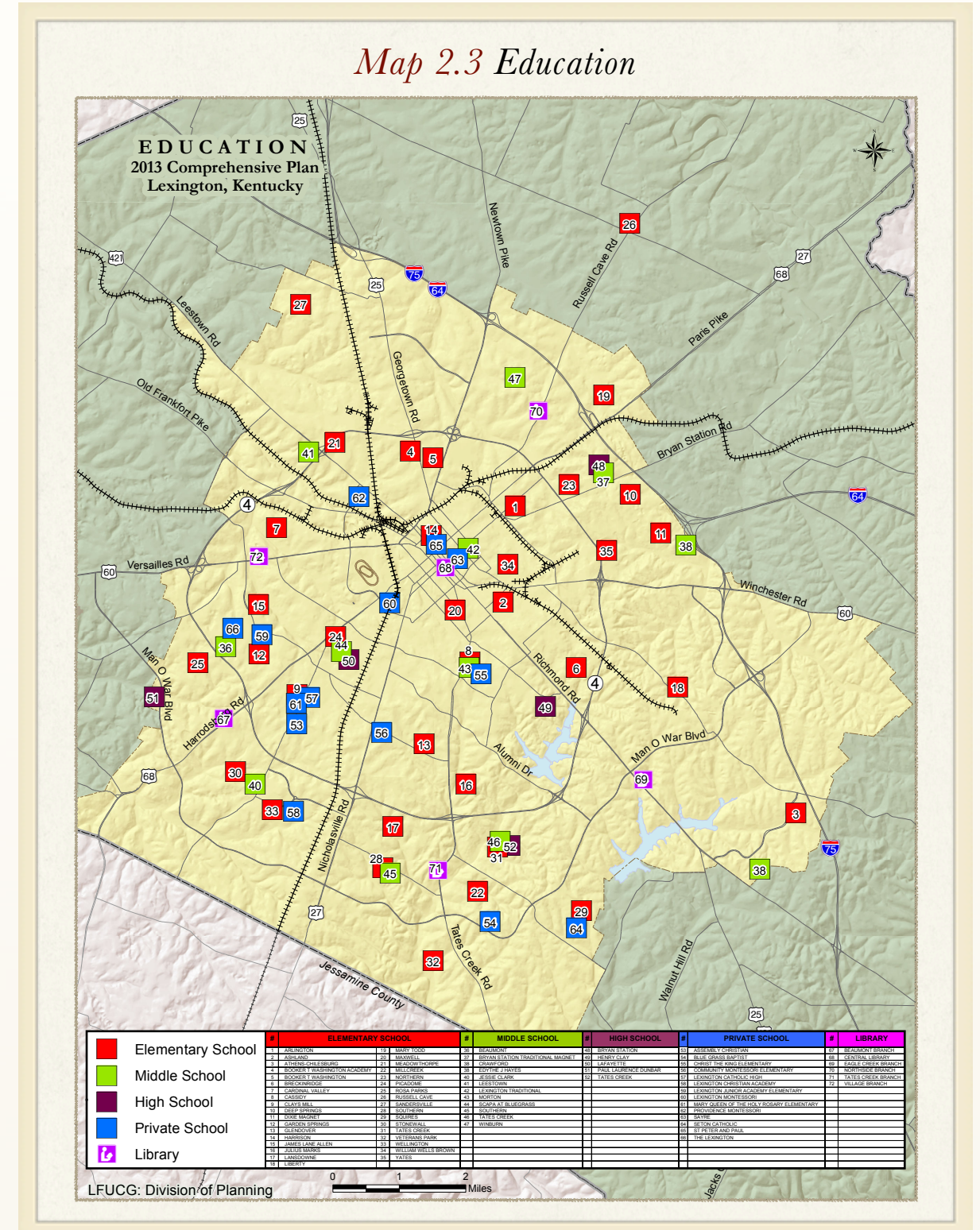
is captured and pumped into the nearby Town Branch Waste Water Treatment Plant. There are nine wells for monitoring ground water around the landfill. A portion of the landfill is open to the public at times throughout the year for distribution of mulch made from yard waste.

Recycling

Lexington's recycling center located at 350 Thompson Road, is a multi-county facility owned and operated by the LFUCG. It was expanded to a single-stream materials recovery facility (MRF) in 2010, which enables residents to commingle all recyclables in one container. The [5-Year Update of the Area Solid Waste Management Plan](#) calls for a new facility by 2018 with higher and faster capacity for separating and preparing recyclables for end-users. The Bluegrass Regional Recycling Corporation (BRRC) assists LFUCG by acting as a regional marketing agent for the participating municipal and county governments that recycle through LFUCG Recycling Center.

Recycling is collected once each week from more than 52,000 households in the Urban Service Area. Residents that do not receive LFUCG recycling services may take their recycling materials to one of [14 drop off-off](#) locations. Lexington offers free recycling of electronic waste at a drop-off facility near downtown. The E-Cycle Center accepts a long list of residential electronic waste, including computers, fluorescent bulbs, cell phones, televisions and microwave ovens.

[The 5-Year Update of the Area Solid Waste Management Plan](#) was completed and adopted by the Urban County Council in November 2012. It includes a Collection Action Plan, a Disposal Action Plan and



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a Recycling Action Plan with the following proposals:

- ❖ Establish a community-wide zero waste goal
- ❖ Provide a permanent household hazardous waste facility
- ❖ Convert collection truck fleet to compressed natural gas
- ❖ Investigate waste-to-energy technologies
- ❖ Build a new Materials Recovery Facility for separating and preparing recyclables for end-users.
- ❖ Investigate alternative methods for managing biosolids from the wastewater treatment plants

Commercial customers who have large recycling containers can receive recycling service two times a week at no cost. Working with Bluegrass PRIDE, LFUCG hopes to expand commercial recycling by 100 users per year. To increase recycling opportunities, commercial developments should consider designing their waste collection areas to accommodate large recycling containers.

Public Schools

[Fayette County Public Schools](#) have a tremendous impact on Lexington. They educate 83 percent of the children in Fayette County. Their buildings, grounds and activities affect neighborhood character and land use and influence transportation systems. The school itself is often seen as a neighborhood or community center and green spaces and playgrounds are often shared with the neighborhoods. Major community decisions, therefore, should include FCPS as a partner.

Since 2001, the district has invested over \$117 million in new construction and renovation projects, and over \$23 million in site improvements.

The Local Planning Committee, a standing committee appointed by the Board of Education, meets regularly to review and plan the facility needs of the district. The committee, which includes teachers, parents, school administrators, community members, and the Division of Planning, created a four-year plan to meet current and future facility needs. The current [District Facilities Plan](#) was adopted in 2013.

Between 2005 and 2012, FCPS constructed four new elementary schools, a new middle school, a technical center and rebuild Bryan Station High School. Another new elementary school is scheduled to open in 2015 in the residential area east of I-75 on Deer Haven Lane.

FCPS Site Requirements

Fayette County Public Schools has adopted requirements for new school sites, including minimum buildable areas:

Elementary:	15 acres
Middle:	20 acres
High:	50 acres

In addition, the sites must have 400 feet of street frontage, be free of environmental hazards and must have access to all utilities, including sanitary sewer.

The new District Facilities Plan calls for:

- ❖ Two new high schools (1,800 and 600 students)
- ❖ One new middle school (900 students)
- ❖ Two new elementary schools (650 students each)

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In addition, the Plan anticipates renovations at numerous school sites and facilities. The desired area for the large high school is in the eastern portion of the Urban Service Area and the smaller high school will be located near UK where students will eventually take some of their courses on campus. As with all new school sites, there are minimum size and infrastructure requirements.

Five high schools currently serve over 11,000 students at close to full capacity, an increase of 1,650 above the number of students enrolled in 2007. Replacement of the old Bryan Station High School has improved FCPS's ability to serve high school students on the north side of town.

Middle school enrollment has been steady at 7,700 students since 2001. Several middle schools will be renovated according to the District Facility Plan.

There are 34 elementary schools with over 16,500 students, with projections showing an increase in elementary students. Over the last 20 years, kindergarten and pre-school enrollment has increased. To address enrollment, the District Facilities Plan calls for two additional elementary schools.

The William Wells Brown Elementary Schools in the East End is among the newest schools and is a cooperative venture between LFUCG and FCPS that also serves as a community center. The community center has programs for all ages such as a weight loss challenge, cooking club, exercise classes, festivals and arts and crafts.

Libraries

The six facilities of the [Lexington Public Library](#) have more than 600,000 items, including books, audio books, DVDs and CDs. Since 2002, annual circulation has exceeded two million items. In addition to circulating materials, each Library location has a non-circulating reference collection that may be used in-house. The Central Library on Main Street includes a Reference Department with four special service areas: 1) The Kentucky Room, 2) the Reference Collection, 3) Telephone Reference and 4) Periodicals. The department also provides the Online Reference Room, which provides access to 17 full-text computer databases, the Kentucky Virtual Library and Interlibrary Loan, which provides patrons with access to books and periodicals not available in the Lexington Public Library's collection. Central Library has a theater for performances, movies, lectures and presentations.

LEXINGTON PUBLIC LIBRARY LOCATIONS	
Central Library	140 East Main Street
Beaumont Branch	3080 Fieldstone Way
Eagle Creek Branch	101 North Eagle Creek Drive
Northside Branch	1733 Russell Cave Road
Tates Creek Branch	3628 Walden Drive
Village Branch	2185 Versailles Road

The Library's newest facility, built in 2008 is the Northside Branch, which replaced the former adjacent building on Russell Cave Road. The library is state-of-the-art with more meeting space and services for North Lexington, plus additional public computers and literacy

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classrooms. It also provides space for the Library's cable channel staff and for Central Kentucky Radio Eye, the volunteer reading service for the blind.

Hospitals and Healthcare

As a regional healthcare provider, Lexington is home to numerous full-service hospitals and clinic facilities offering a variety of services. There are over 2,500 hospital beds in Lexington, including facilities for veterans, in-patient rehabilitation, children and cancer. Most of the major healthcare facilities are inside New Circle Road. Recent changes to the zoning ordinance will enable the construction and operation of comprehensive medical facilities, including hospitals in the Expansion Area. The following chart summarizes the areas of specialties and number of bed of Lexington's hospitals:

Water Supply

Lexington's source of raw water is the Kentucky River. Water treatment and distribution are provided by the privately-owned Kentucky-American Water Company. Kentucky-American Water holds two water withdrawal permits for the Kentucky River: one for the KRS I plant on Pool No. 9 in Fayette County and one for KRS II plant on Pool No. 3 in Owen County. The Pool No. 9 permit allows up to 63 million gallons of withdrawal per day at the KRS I intake, and the Pool No. 3 permit allows up to 20 million gallons of withdrawal per day at the KRS II intake. Jacobson Reservoir is a secondary source for drinking water and also provides recreation. Richmond Road Station can treat water that is pumped to it directly from the river or the Jacobson Reservoir. The KRS I plant is rated to treat up to 40 million gallons per day (mgd), the Richmond Road Station is rated for 25 mgd, and the KRS II plant is rated for 20 mgd, for a total of 85 mgd of rated water treatment capacity.

Image 2.1 Lexington Public Library Rotunda



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The [20-Year Comprehensive Water Supply Plan](#) recommends that the Kentucky River and its tributaries should be protected from dumping, discharges, spills and undesirable development for a minimum of one mile upstream of the intake.

The Royal Spring Wellhead Protection Area is the source of Georgetown's drinking water, with 80 percent of the aquifer recharge area in Fayette County, covering 1,624 acres of the Cane Run Watershed.

Sanitary Sewers and Water Quality

The [Division of Water Quality](#) provides citizens of Lexington with wastewater treatment and stormwater management services. The sanitary sewer system includes 81 pump stations, 1,367 miles of sewer line, 28,000 manholes, and two large wastewater treatment plants. Parts of the collection system date to the 1930s and are in constant need of repair. The stormwater management programs include design, review, construction and inspection of stormwater infrastructure and creation of stormwater runoff control and flood mitigation projects.

Town Branch Wastewater Treatment Plant

The Town Branch Wastewater Treatment Plant was among the first sewage treatment plants in this section of the United State. It began operating in 1919 at its current location near Old Frankfort Pike inside New Circle Road. This plan is designed to treat wastewater from 60 percent of Fayette County. It is designed for a flow of 30 million gallons per day (mgd), but can treat a maximum of 64 mgd. The average daily flow in 2012 was 16.97 mgd.

West Hickman Wastewater Treatment Plant

Lexington's West Hickman Creek Wastewater Treatment Plant began operating in 1972 on a 269 acre site in Jessamine County, just south of Fayette County. In 2001, the West Hickman Plant was expanded to a capacity of 33.8 mgd with a peak capacity of 64 mgd. The average daily flow in 2012 was 16.39 mgd.

Pump Stations

The 81 pump stations throughout Fayette County, which range in capacity from 1,000 gallons per day at the Georgetown Road firehouse to 5,000,000 gallons per day at Wolf Run. Pump stations are necessary in the conveyance of sewage from a large area to a centralized treatment facility. Pump stations are needed to "lift" the sewage through a force main to a point where it can continue to flow by gravity to the treatment plan. Lexington is unusual in its topography in that water runs away from Lexington in almost all directions. This makes it difficult to take advantage of the flow of gravity and results in the necessity of more pump stations than other cities of comparable size.

In addition to maintaining the sanitary sewer and stormwater systems, the Division of Water Quality works with local community groups and other Divisions of the Urban County Government to provide opportunities for the public and local businesses to participate in improving water quality for the community. These activities include Reforest the Bluegrass and the Great American Clean-up, among others. **For more information about the EPA Consent Decree and the Capacity Assurance Program, please see Chapter 4.**

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HOSPITAL	# OF BEDS	AREAS OF SPECIALTY	SOURCE OF PATIENTS
Cardinal Hill	108	Physical Rehabilitation serving spinal cord, stroke, brain injury, pulmonary and general rehabilitation	All of KY, parts of WV, TN and OH
Baptist Health	383	Obstetrics, Cardiac, Stroke, Surgery and Women's Care	Fayette, surrounding counties and East KY
Eastern State	323	Psychiatric and Chemical Dependency	17 county Bluegrass Area
Lexington VA Medical Center	199	Acute care in Medicine, Surgery, Neurology and Mental Health, both inpatient and outpatient	Central, Eastern and Southeast KY
The Ridge	110	Psychiatric and Chemical Dependency ages 5 and up, both inpatient and outpatient	110 of 120 KY counties and contiguous states
Shriners	50	Children's Orthopedic Hospital	KY, TN, WV, OH and IN
Saint Joseph East	182	Include Obstetrics, Women's Services, Cardiac Care, Bariatrics and Orthopedics	Fayette County, Central and Eastern KY
Saint Joseph	468	Include Cardiology, Digestive Health, Neurosurgical and Surgical, plus others	Central and Eastern KY, 75% from Bluegrass area
UK Healthcare Good Samaritan	191	Orthopedics, Urology, Neurology, Psychiatry, Diabetic Wound Care, Sleep and General Surgery	Central and Eastern KY
University of Kentucky	569	Trauma, Newborn Intensive Care, Cancer, Cardiology, Kentucky Children's Hospital, and Neurosciences	Regional Referral Center

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Electric Service

Fayette County is served by three electric companies. [Kentucky Utilities](#) has more than 142,000 customers in Fayette County and serves more than 546,000 customers in 77 counties in Kentucky and five counties in southwestern Virginia. Parts of rural Fayette County are served by the [Bluegrass Energy Cooperative](#) (6,147 meters) and the [Clark Energy Cooperative](#) (101 meters). These non-profit customer-owned electric distribution cooperatives are headquartered in

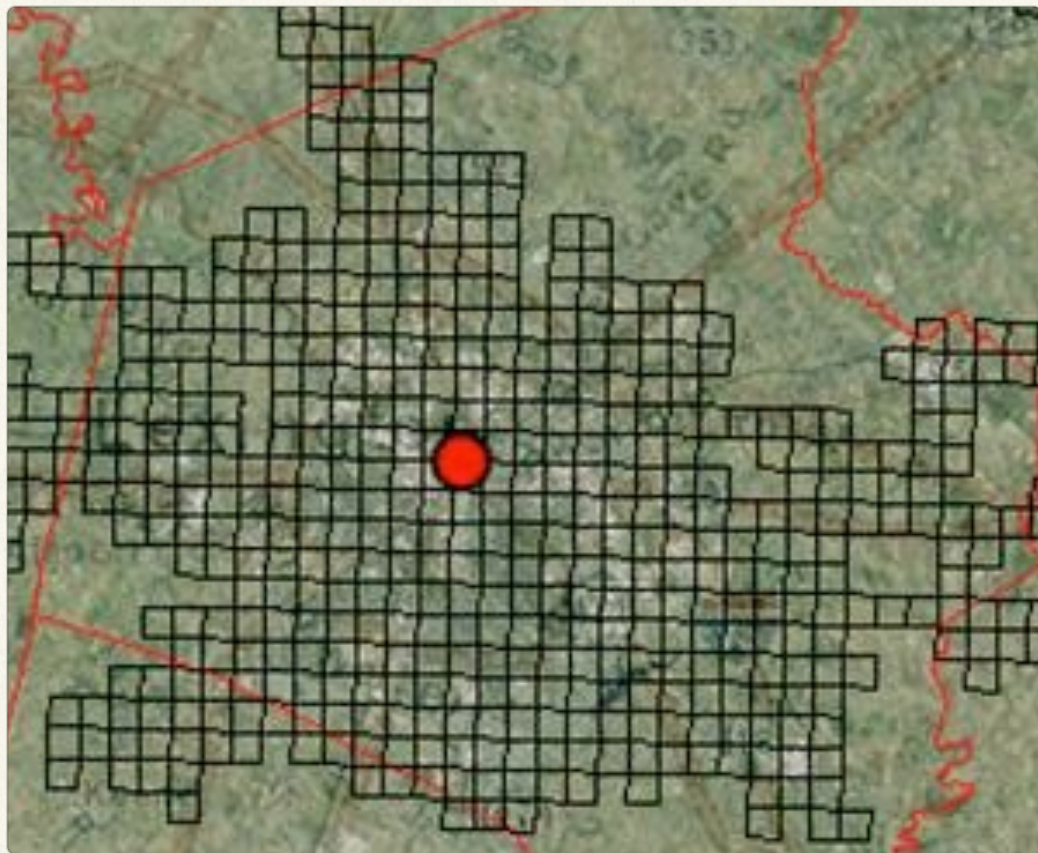
Nicholasville and Winchester, respectively.

Natural Gas Service

Natural gas is delivered to customers in Lexington by Columbia Gas of Kentucky, a subsidiary of Columbia Energy Group. Columbia Gas serves over 140,000 customers in Central Kentucky, 75,000 located in Fayette County. Customers may choose a different natural gas supplier, which is then delivered by Columbia Gas. The black grid on the map shows the coverage of the natural gas distribution lines in Fayette County.

Image 2.2 Natural gas distribution lines in Fayette County

Red Dot is a center point used by Columbia Gas. Distribution line coverage does not mean natural gas use, but does indicate available service.



Recommendations for new policies and strategies for Community Facilities

Continue partnership between Divisions of Fire and Planning to review locations of future fire stations in relationship to infill and other development opportunities

- * Continue partnership between Fayette County Public Schools and Division of Planning to review locations of new schools
- * Create a process to evaluate access to parks for infill and new developments
- * Implement the 20-Year Comprehensive Water Supply Plan

Planning Implementation from 2007 through 2012

East End Small Area Plan

The East End Small Area Plan was adopted in April 2009. The planning process was led by EHI Consultants along with Urban Collage and Wilbur Smith, Inc., with public outreach in partnership with the Legacy Center at Bluegrass Community Foundation. The

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steering committee included 19 people from the Urban County Council, Planning Commission, LFUCG staff, local housing agencies, Fayette County Public Schools, the Downtown Development Authority, various non-profit agencies and community leaders with interests in the East End. The study, design and public outreach were assisted by Division of Planning staff. Funding for much more of the public outreach was provided by the League Center.

A lack of services, a lack of access to a major grocery store, declining properties, poverty, pedestrian facilities, signage, streetscape improvements, and preservation of historical and cultural heritage were among the long list of factors that led to a need for this small area plan. This small area plan involved public input events and meetings, including a cookout open to the neighborhood with informational booths representing various public service organizations and government services sponsored by the Bluegrass Community Foundation. The plan covered 381 acres and was bounded by Winchester Road, Midland Avenue, East Short Street, Elm Tree Lane and the railroad near Loudon Avenue. Following adoption of the East End Small Area Plan, a work group was assembled, which included many who served on the steering committee, to help advance implementation tasks from the Plan.

While there have been many successes in the East End since the Plan was adopted, including the renovation of the Lyric Theater and the Charles Young Center, along with plans for the Isaac Murphy Memorial Art Garden, the most vexing issues are development of retail uses as part of a neighborhood center, particularly a full-service grocery store. Households in this area are more likely to not have a car,

and have moderately high incidence of households living below the poverty-level, making the need for easy access to affordable and healthy food all the more imperative. Efforts to address this problem are being accomplished through a seasonal farmer's market, two small downtown grocery stores, community gardens, plans for a community kitchen and a mobile food bus. Until a full-service grocery store is established, however, residents will continue to be burdened by poor access to good food.

Central Sector Small Area Plan

The Central Sector Coalition, a group of neighborhood associations and business owners, asked the Planning Commission to initiate a study of this area for a number of reasons, including problems with density, land use, zoning, public safety, traffic, transit, schools, community facilities, infill and infrastructure.

The Central Sector Small Area Plan, adopted in 2009, was led by consulting group RATIO, Inc. along with Development Concepts, Inc., and ECSI. The Central Sector Small Area Plan steering committee included neighborhood associations, representatives from educational institutions within the study area (Bluegrass Community and Technical College, Transylvania University, and Fayette County Public Schools), Urban County Council, Planning Commission, and expertise from ECU in design and crime, along with staff members from the Division of Planning.

The CSSAP included 2,500 acres and was divided into five subareas for inventory, analysis and recommendations. There were two public workshops where strengths, weaknesses, opportunities and threats were

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collected, with the results used to formulate the vision, guiding principles, goals and objectives. In addition, the steering committee participated in two public workshops working in small groups and receiving one-on-one public comment. An open house was later held for the public to review the final draft of the plan.

The guiding principles were:

- ❖ Enhance the Urban Fabric
- ❖ Promote and prepare for redevelopment and investment
- ❖ Provide adequate and equitable housing
- ❖ Preserve the cultural and historic heritage

Some of the highlights of the plan integrating and connecting a new location of BCTC at the former Eastern State Hospital site, connecting new housing to Douglas Park and enhancing the park, revitalizing the 4th Street corridor and connecting neighborhoods and pedestrians to the non-residential uses along New Circle Road.

Like the East End Plan, Central Sector recognized the need for better access to food through a full-service grocery store. Several areas within Central Sector have a high incidence of people living below poverty and without a car. And like East End, there has been little success to ameliorate the problem.

Following adoption of the Central Sector Small Area Plan, a work group was assembled, which included many who served on the steering committee, to help advance the implementation tasks from the plan.

South Nicholasville Road Small Area Plan

The South Nicholasville Road Small Area Plan was adopted by the Planning Commission in November 2009. Most of the 385-acre study area included three farms that had been designated for urban use for decades and are located at the busiest traffic intersection in Fayette County. The high-profiled properties include one owned by the University of Kentucky as a research farm, one with a failed and controversial zone change request and one with an abandoned development plan.

A steering committee was formed with neighborhood associations, Urban County Council, representation from University of Kentucky, management of Waveland Historic Shrine State Park, property owners, representation from the Bluegrass Area Development District and Lexington's economic development leadership. There were three public input meetings and two focus group meetings. One of the focus groups met to gain knowledge of future plans and existing issues for the four churches and one religious school. The other collected information about land use wishes and issues from the residents and owners of residential property. The concept of vertical mixed use was presented, discussed and feedback was obtained via a survey.

This study area has greenways and bicycle/pedestrian trails at some stage of development that are planned, funded or built. Two livestock tunnels will allow access under the railroad and Nicholasville Road for future trail use. This portion of Nicholasville Road has the highest traffic counts in the city and is attractive to commercial development due to its visibility. This small area plan relied heavily on consultation and input from the Kentucky Transportation Cabinet for vehicular

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connections, access and intersections. LexTran expressed an interest in building a transfer center in the vicinity.

The three farms were designated for mixed-use development, including a variety of residential types, with bicycle/pedestrian and greenways connecting to adjacent neighborhoods. The plan includes recommendations for a neighborhood center and greenspace surrounded by mixed-use areas with connectivity by all modes of transportation. The new land use recommendations could add no less than 430 new housing units, along with employment, shopping and other services within walking distance. Greenspace buffering was recommended between Waveland and future development both to the north and to the south.

Tax Increment Financing (TIF) Development Plans

TIF is a tool to spur redevelopment that enables developers to forego certain increases in taxes brought about by the improvements. To be eligible for application for TIF funding, a development area must meet two or more of the following criteria, as established by state statute:

- ❖ Substantial loss of residential, commercial or industrial activity or use
- ❖ Forty percent or more of the households are low-income households
- ❖ More than 50 percent of the residential, commercial or industrial structures are deteriorating or have deteriorated
- ❖ Substantial abandonment of residential, commercial, or industrial structures
- ❖ Substantial presence of environmentally contaminated land

- ❖ Inadequate public improvements or substantial deterioration in public infrastructure
- ❖ Any combination of factors that substantially impairs or arrests the growth and economic development of the city or county, impedes the provision of adequate housing; impedes the development of commercial or industrial property or adversely affects the public health, safety or general welfare due to the development area's present condition and use.

For information about TIF as a tool to create jobs, see Ch. 5.

The following developments have been approved for TIF in Lexington:

Phoenix Park

Public Improvements include restoring Historic Fayette County Courthouse, parking, enhancing Phoenix Park, streetscape upgrades, ADA compliance and public art as part of the proposed downtown CentrePointe development. The \$69.78 million TIF project area is 14.25 acres. CentrePointe proposes towers for a hotel, condominiums, offices, and lower scale buildings for a variety of uses.

Distillery District

There are ongoing discussions for public improvements for the Distillery District that would include façade enhancements and cultural facilities, a parking structure, storm and sanitary sewer upgrades, environmental remediation and sidewalk and road improvements. The \$45.8 million TIF covers 25 acres. The Distillery District Plan calls for a mixture of uses, including an area for a farmer's market and entertainment and over 250 new housing units. It

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includes adaptive reuse and new construction. A greenway system and trail is proposed to improve bicycle/pedestrian connectivity and to enhance the existing floodplain.

The Red Mile Project

Public improvements for Red Mile include parking structures, sanitary sewer and storm sewer improvements, new internal roads and sidewalks, and improvements to Red Mile Road. The \$25.3 million TIF project is on 93 acres. The harness racetrack proposes a mixed use development of apartments, a hotel, retail, restaurant spaces, parking garages and offices.

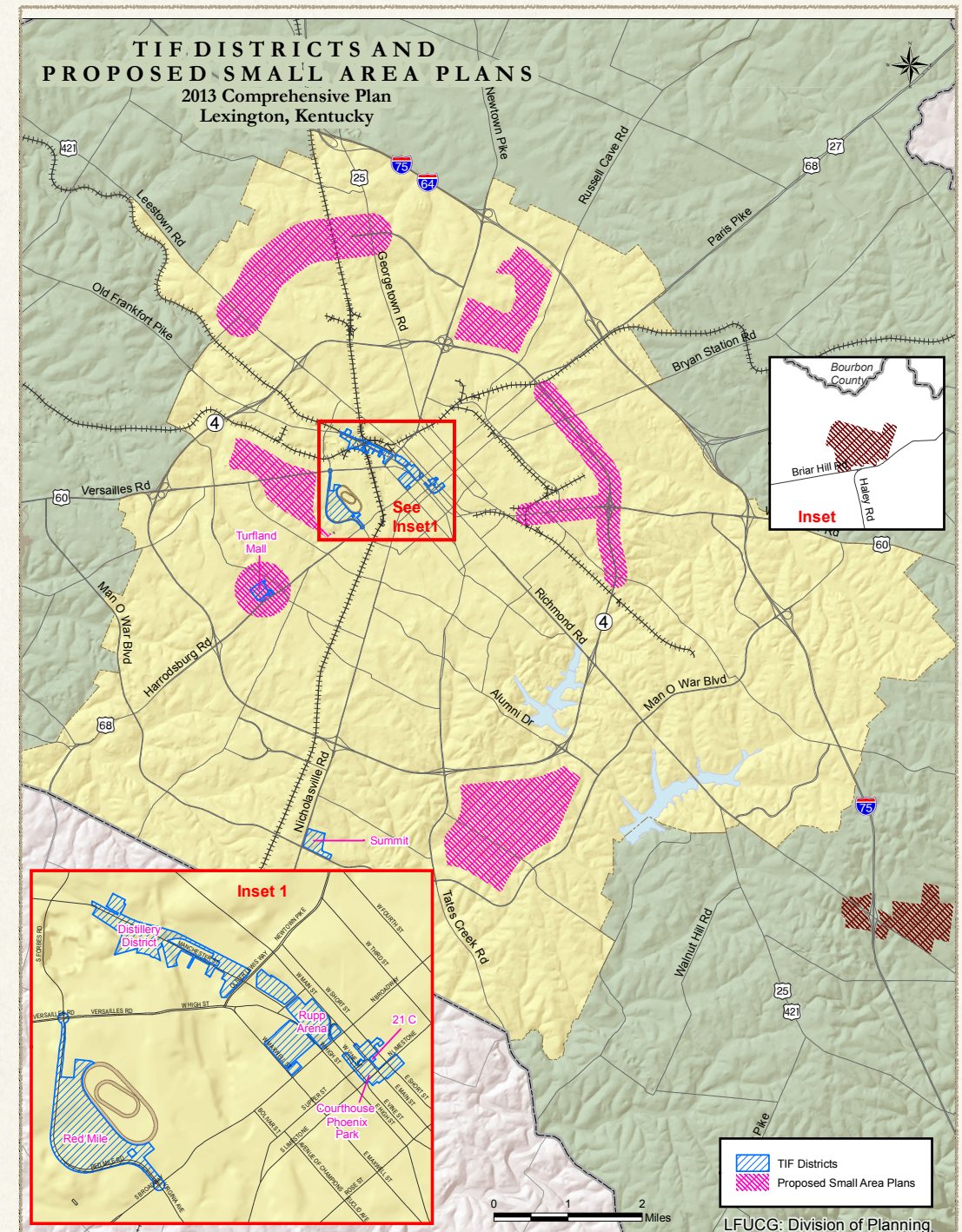
21c Museum Hotel

Public improvements for 21c Museum Hotel include curbs, sidewalks and street lighting. The \$500,000 TIF is on .28 acres at the site of Lexington's first skyscraper, the 15-story Fayette National Bank building built in 1912.

Image 2.3 Coldstream Research Campus



Map 2.4 TIF Districts and Proposed Small Area Plans



Three additional TIF districts are in various stages of review and approval, including **Turfland Mall**, **Rupp Arena**, and **Bayer** at the northeast corner of Nicholasville Road and Man o War Boulevard.

Other Collaborative Planning Efforts

Coldstream Research Campus

In 2009, the University of Kentucky invited LFUCG staff from the Divisions of Planning and Parks and Recreation to participate in a consultant-led process to redesign the plan for Coldstream Research Park and create a new master plan. The proposed master plan intensifies the density of research and jobs-creating uses and introduces residential and retail uses.

Red Mile Development Plan

The Red Mile Development Plan, approved by the Planning Commission in 2009, included elements of small area planning where public input was sought and considered by the developer before completing the development plan. The development plan proposes to add 250,000 square feet of commercial space, about 200 residential units, a hotel, an entertainment complex and 50,000 square feet of office space. The design incorporates an internal greenway. During the public input process, residents expressed interest in neighborhood-serving retail for the site including a grocery store.

Chapter 3

GROWING SUCCESSFUL NEIGHBORHOODS

What is a successful neighborhood?

**Why are some Lexington neighborhoods set apart
as great places to live?**

**How can all of Lexington's neighborhoods be
great and successful?**



GROWING SUCCESSFUL NEIGHBORHOODS

Lexington's neighborhoods are lively and diverse places with histories, personalities, stories, famous residents, unique businesses, local restaurants and ethnicities. People choose their neighborhood for many reasons, including housing affordability and the test scores of nearby schools. They may buy a house for investment reasons. People may identify with their neighborhood because their parents lived there, and they hope their children will too. To them, their neighborhood defines who they are; it is part of their heritage. When people move into a neighborhood, they inherit the pride and identity associated with it that has been established over generations. In new neighborhoods, people have the opportunity to create their own history.

Neighborhoods are the environments in which our children grow and thrive. They are where we live our lives. Neighborhoods that have a lot of people walking and people moving around, access to greenspace, and a strong social network are the kinds of places that build physical, social, mental and emotional health and well-being.

The physical layout and visual cues that make a neighborhood unique start with its form. The ideal structure of a neighborhood is composed of places to reside, work, shop, learn and play. How these spaces are organized and relate to one another influences public health, cultural expression, environmental health, safety and economic vitality.

It takes a community effort to build and maintain a successful neighborhood. The effort is heightened when a neighborhood has declined, is experiencing loss, or is no longer attracting new residents and investment. At its core, the 2013 Comprehensive Plan promotes neighborhood prosperity and success. It provides the tools to ensure that all neighborhoods - old and new, thriving and in decline - are given full access to paths to success.

Land Use: Great Neighborhoods by Design

How does design help a neighborhood succeed?

- * Creates a sense of place and identity
- * Increases safety and security

What does the 2013 Comprehensive Plan recommend?

- * Provide a variety of housing types in all neighborhoods
- * Provide access from housing to parks, greenways and neighborhood centers
- * Place the fronts of housing towards parks and open space.

An outcome of the 2007 Comprehensive Plan was a directed staff review of development standards to determine what changes to existing regulations could lead to improvements for new neighborhoods. The New Development Character and Design Work Group recommended a planning and regulatory framework that will help create Great Neighborhoods in newly developing or redeveloping areas.

GROWING SUCCESSFUL NEIGHBORHOODS

These neighborhoods will have a clear sense of place when the following standards are met:

- ✦ Inviting streetscape
- ✦ Varied housing choice
- ✦ Abundant private and public open space
- ✦ Neighborhood focal points
- ✦ Quality connections with parks, schools and stores

The work group drafted a process to evaluate new neighborhoods with clearly defined and objective criteria. The criteria could be applied to greenfield developments or large redevelopment sites, such as Turfland Mall.

To begin, the project team conducted a literature review of Planning Best Practices to identify the characteristics that comprise well-designed and highly functional neighborhoods, which include:

Inviting Streetscapes

Transportation networks and the design of the public rights-of-way affect the character of surrounding areas, neighborhood livability and community cohesion. Streetscapes can play an important role in reinforcing the positive attributes of a community or neighborhood. Through place-making, they create new positive spaces and identities.

Place-making and walkability are important to the success of Lexington and its neighborhoods. A variety of [best-practice reviews](#) show that property values tend to be higher in more walkable

neighborhoods that contain a mix of nearby destinations connected by pedestrian-friendly streets.

A complete streets approach to roadway design in Lexington's neighborhoods can improve walkability by providing direct and easy access for residents to local destinations by foot to reduce the need for car trips. Street trees, sidewalks, adequate landscape buffers, pedestrian-scaled lighting and appropriate pavement widths discourage speeding and the need for costly traffic calming retrofits.

Traffic speeds dramatically affect a pedestrian's actual and perceived sense of safety as well as the quality of life in neighborhoods.

Likewise, speeding is a common concern for residents. Pedestrians struck by a motor vehicle traveling at 40 miles per hour are fatally injured 85 percent of the time. Speeds at 30 mph reduce the risk of death to 45 percent. Only 5 percent of pedestrians struck by vehicles traveling at 20 mph are fatally injured. It is important, therefore, to reduce vehicle speeds in high pedestrian activity areas, such as neighborhoods, commercial areas, schools and parks.

Vehicle speeds are heavily influenced by roadway design regardless of the posted speed limit. Narrow, curvilinear street with on-street parking and street trees help to slow traffic and create a pedestrian-friendly atmosphere. Residential streets that are overly wide and straight and lack a vertical edge, such as trees or buildings, enable fast moving traffic.

GROWING SUCCESSFUL NEIGHBORHOODS

Urban Forestry

The urban forest provides many environmental, social and economic benefits to the neighborhood, community and property owner. Trees are the **most effective way** to protect and maintain an urban ecosystem. They reduce the heat island effect, clean the air, absorb carbon dioxide, slow and absorb water runoff and help control soil erosion. They provide food, shelter, nesting sites and protection for birds and other animals. Trees increase property values and enhance neighborhoods. Street trees unify a block and provide a sense of scale and buffering from the street. An updated tree canopy inventory would provide important information about the status of the urban forest and establish a baseline for future measurements to ensure we meet the **national guideline** of 30 percent tree canopy coverage for residential areas. A comprehensive Urban Forestry Management Plan should be developed to provide strategies for reaching canopy coverage goals and guide LFUCG for the best management care of public trees.

The urban forest can be found in neighborhoods along street, in natural areas, parks and other greenspaces and in residential and commercial landscaping. There are few tree stands over one acre in the Urban Service Area, and their condition may be compromised due to invasive species. For a time, neighborhoods were not required to include street trees.

The **Reforest the Bluegrass** program has successfully enlisted over 10,000 volunteers to plant 100,000 seedlings in 180 acres of floodplains. The survival rate of these trees has been significant enough to add to tree canopy coverage, restore habitat, improve water and air quality and reduce the need to mow. On a smaller scale, new street tree planing is ongoing along major arterials through the LFUCG Corridors Committee. The **2012 Empower Lexington Plan** includes a voluntary program for improving energy usage through urban forestry.

Varied Housing Choice

By providing housing choices within a neighborhood, residents of a community have greater options of where to live, particularly when the components of housing choice include access to jobs and schools, affordability, and housing type. Diverse neighborhoods feature townhomes, apartments and condominiums and duplex housing adjacent and mixed with single-family homes. They provide the opportunity for more personal interaction and **security**. The added population of higher-density residential development increases the viability of neighborhood commercial development as well.

Abundant Open Spaces

Over the years, green infrastructure has continued to play a role in shaping Lexington's urban form through conscious decisions on where to protect greenspace, cultural resources, and natural resources. While most of these greenspaces and resources in Lexington are isolated from each other, patches of greenspace are integral to the urban landscape, especially at the neighborhood scale. Greenspace is key to successful neighborhoods. An interconnected and accessible green infrastructure system consisting of vibrant and attractive public spaces, healthy natural areas and plentiful recreation opportunities create neighborhoods where people want to live.

The **Greenspace Plan** describes greenspace as more than rural landscapes. Greenspace encompasses urban parks, greenways, boulevards and historic sites. Neighborhoods such as Gratz Park, Bell Court, Woodland Park, Ashland Park and Downtown are recognized as greenspaces because they contribute to the overall Bluegrass identity. Indicative of Lexington's roots, settlement patterns for these

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older neighborhoods as well as others, such as Northside, Western Suburb, and Mulberry Hill, are characterized by narrower interconnected streets and sidewalks and structures oriented towards the street or park, which create a vibrant relationship with the public domain. Examples of greenspaces located within neighborhoods may include:

- * Public Parks
- * Trails
- * Natural areas, including greenways and urban forest
- * Golf courses
- * Church lawns
- * School grounds
- * Green streets, including boulevards and other scenic corridors
- * Open spaces, such as landscaped plazas, courtyards, amphitheaters and stormwater basins
- * National Register and local historic sites and districts
- * The Arboretum
- * Cemeteries
- * Ashland, the Henry Clay Estate
- * Office parks
- * College campuses

There is not a standardized measure for determining the amount of greenspace required for a neighborhood. In the past, park and open space planning relied on national standards based on acreage, distance and persons served per sport. National trends are moving away from ascribed standards in favor of flexibility to change with demographics and demands. The old neighborhood park model no

Development Incentives

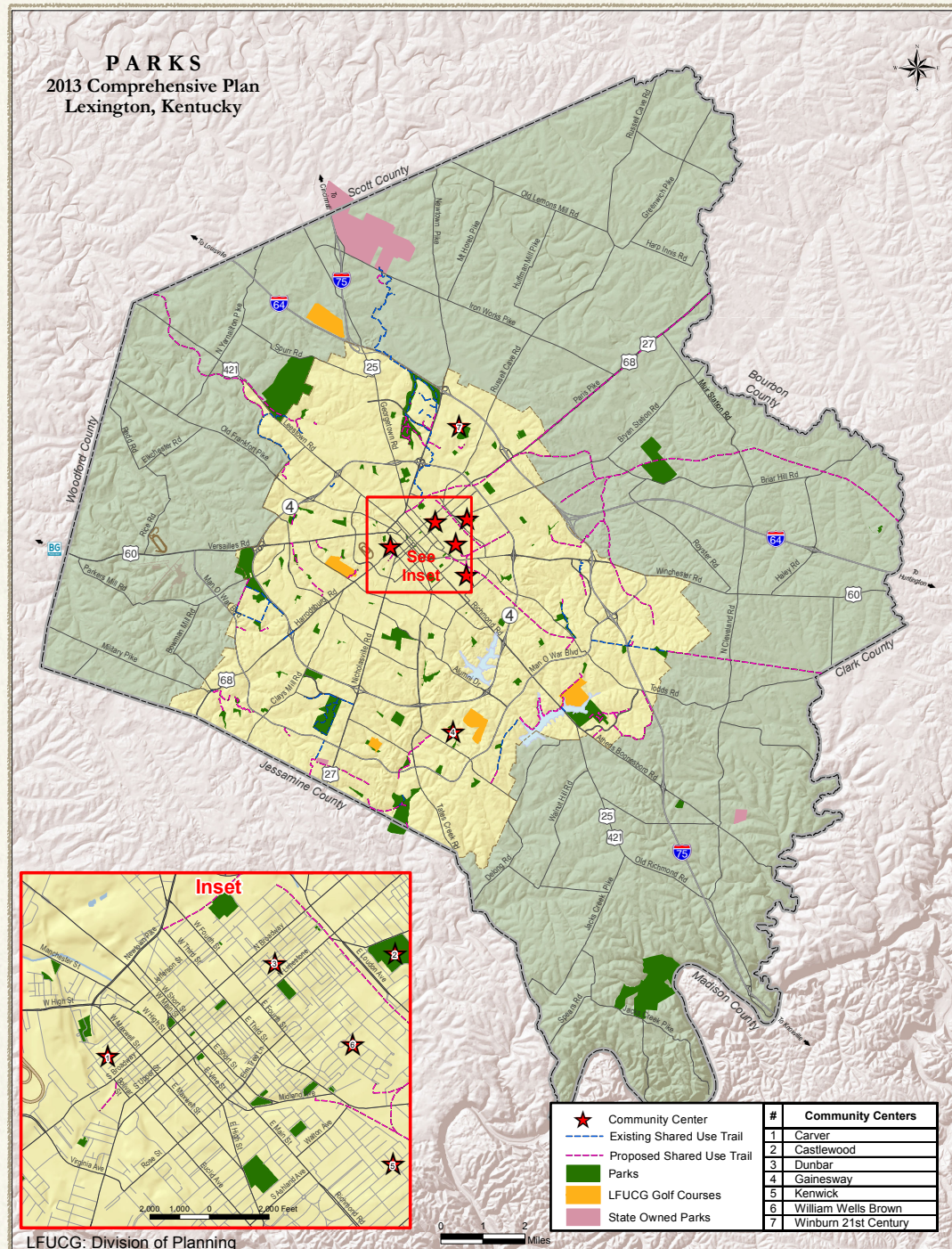
The Urban County Government has a role in supporting a better life for its citizens and helping to build resilient communities.

This role includes making and enforcing the rules for development for the benefit of the community. In order to build great and successful neighborhoods, it would be useful to identify financial, regulatory, and operational incentives that encourage innovative developments. The following list of incentives is not necessarily inclusive, but is a starting point for discussion:

- * Review the Zoning Ordinance for impediments to the development of successful neighborhoods with an eye towards retooling zoning categories that are not fulfilling their potential.
- * Enable the Division of Planning staff to approve final record plats.
- * Establish an objective and standardized process to evaluate new developments for neighborhood character that, if met, would expedite approval of the the development.
- * Convene a summit of financial and neighborhood development leaders in order to increase understanding of the financial costs and challenges to funding mixed-use, multi-family, and innovative developments.
- * Ensure the exaction fees are reviewed and revised to meet the infrastructure needs of the Expansion Area.
- * Establish partnership opportunities by funding the Land Bank and creating an affordable housing trust fund.
- * Pursue Federal and state funding for high-cost projects of a community interest, such as bridges and community centers.

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Map 3.1 Parks



Southland and Townley

Several neighborhoods possess at least some of the important place making characteristics, including one that was developed decades ago and other one that is on the rise:

Southland to Pasadena

The neighborhoods between Southland and Pasadena Drives and Clays Mill Road and Eastway Drive, and including the streets near Lafayette High School have streets connected in a grid. The southland Drive commercial area is accessible from four points.

Neighborhood parks are integrated well into the surrounding community and are easily accessible through all forms of transportation. With two parks and the commercial area on Southland Drive within one mile, citizens can meet most of their daily needs locally. Parts of this area are more than 70 years old, yet new and redevelopment continues to occur.

Townley and Meadowthorpe

Townley Center, no more than a decade old, and the decades-old Meadowthorpe are complement each other as an edge community. The area blends older post-war residential with a will integrated neighborhood shopping center and larger shopping center with a major grocery store, banks restaurants and other shopping

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longer works since different neighborhoods demand different types of parks, some of which are not developed for contemporary needs.

To ensure that a greenspace is properly sized, located and preserved so that its intended use best serve a neighborhood will require more integration with the planning process and flexible greenspace and open space regulations. Considerations include:

- ✦ Parks geographically and strategically located as determined by conservation, recreation and open space needs of the neighborhood.
- ✦ Parks and greenspace located to fill gaps in the green infrastructure network.
- ✦ Parks and greenspace needs in the expansion area and Downtown
- ✦ Public greenspace size and location in neighborhoods with higher densities and smaller residential lots
- ✦ Opportunities for new trails, parks and greenspace in new and redevelopment area
- ✦ Flexible greenspace and open space regulations
- ✦ Greenspace in neighborhood parks for leisure and non-structured play and to protect natural resources.
- ✦

Neighborhood Focal Points

The character of neighborhood is made of more than a collection of bricks and shingles. Character encompasses a broad array of qualities. A focal point can be a gathering point such as a park, a shopping center, a community center or public square. To the extent possible, new residential development should be developed to

Secure By Design

Secure by Design focuses on crime prevention for homes and commercial premises and promotes the use of security standards for a wide range of applications and products. Where Secure by Design programs have been implemented, crime has been reduced through standards of physical security and well-tested principles of natural surveillance and defensible space. The program recommends collecting and evaluating crime data for areas of new development and showing how new developments will address crime through design. The data would be reported much like traffic or storm water analysis are presently reported for new developments. The report would include basic demographic information and code violations in the area as well as crime reports. One of the goals of the early reporting is to dispel misinformation and to account for people's fears. Secure by Design research has found that if people are afraid of a land use, they will not use it. Secure by Design seeks to ensure that safety principles are baked in the plans from the beginning in order to set the stage for a successful outcome for the development.

accommodate future site by allowing for easy, multimodal access from the neighborhood instead of development that turns its back on a community center.

Quality Connections with Parks, Schools and Stores

Connecting our neighborhoods, both from within and to other neighborhoods contributes to the overall efficiency of the entire transportation system. Local surveys often identify traffic congestion as a common concern for Lexington residents. The impact of street connectivity, therefore, is significantly misunderstood. Sixty percent of Lexington's roadway system consists of local streets, so their role in overall system efficiency is important, particularly with respect to

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serving localized trips. A disconnected street system means that arterial and collector streets carry large volumes of traffic as they must be used for most trips, even short, local trips. Congestion on major arterials increases traffic collision rates and leads to wide, heavily trafficked streets that are uncomfortable to walk or bicycle along and difficult to cross - especially for children, the elderly and people with disabilities.

Citizens often seek cul-de-sac and loop streets because they carry low traffic volumes. The disconnected street patterns, though, funnel traffic onto the few connected streets within a neighborhood. A complete street network disperses traffic more uniformly so that all streets carry their share of localized traffic. This means that safety and livability benefits are dispensed to the greatest number of households throughout a neighborhood as less traffic is carried on each individual street.

Connectivity is important because it provides for direct routes. Direct connections reduce the overall time and distance we travel. This is important in reducing the total number of vehicular miles driven in a community and helps provide critical services to our neighborhoods in a timely and efficient manner. Streets that are not connected increase the distance and response time for fire, police and ambulance services. It can also require service vehicles to backtrack.

Street connectivity correlates to how people in a community choose to travel from place to place. Pedestrians and bicyclists are sensitive to travel time and distance, thus out-of-direction travel discourages travel by these modes. A study of 24 California communities showed that communities with highly connected street patterns have an average 16 percent walk/bicycle/transit mode share compared to a 4

percent mode share in communities with disconnected street patterns (Garrick and Marshall 2008)

Recommendations for New Policies and Strategies

- ❖ Establish an objective and standardized process to evaluate new developments for neighborhood character.
- ❖ Create development regulations that locate higher density housing nearest public open space.
- ❖ Collaborate with financial agencies, homebuilders, affordable housing providers, and others to identify practical incentives that enable the design of great neighborhoods, which includes a mix of housing and affordability.
- ❖ Develop street design standards that will increase safety for pedestrians and bicyclists.
- ❖ Create design measures that reduce congestion by connecting neighborhoods to collector and arterial roads.
- ❖ Review policies for providing parks and greenspace in the Expansion Area and Downtown to determine if they meet the needs of residents.
- ❖ Develop a comprehensive Urban Forestry Program and Urban Forestry Management Plan.
- ❖ Ensure that park locations are desirable and appropriate.

GROWING SUCCESSFUL NEIGHBORHOODS

Land Use: Old Neighborhoods and New Opportunities through Small Area Planning

How does Small Area Planning contribute to a Desirable Community?

- * Guides growth and development in order to promote neighborhood stabilization and revitalization
- * Addresses the needs and issues in the study area and provides specific plans
- * Can be a catalyst for creating a sense of place and economic opportunity and getting quality food to underserved areas

What does the 2013 Comprehensive Plan Recommend?

- * Create a Small Area Plan for communities with higher than common poverty and reduced access to quality food.

Small Area Planning is a staple of neighborhood planning in Lexington. Neighborhoods are identified for targeted planning for a variety of reasons, including challenging demographics, anticipated changes that could alter the character of the neighborhood and underinvestment by public or private agencies. Small Area Plans are intended to guide growth and development in order to promote neighborhood stabilization and revitalization. These plans may include community design, identification of infill and redevelopment opportunities and areas where new development can take place. The process includes the identification of the area to be studied, a survey of land use patterns, and a review of public facilities and the cultural and social conditions of the defined area. The SAP

should be responsive to the conditions, needs, and issues of concern in the study area to clearly define preferred land uses and a path to desirability.

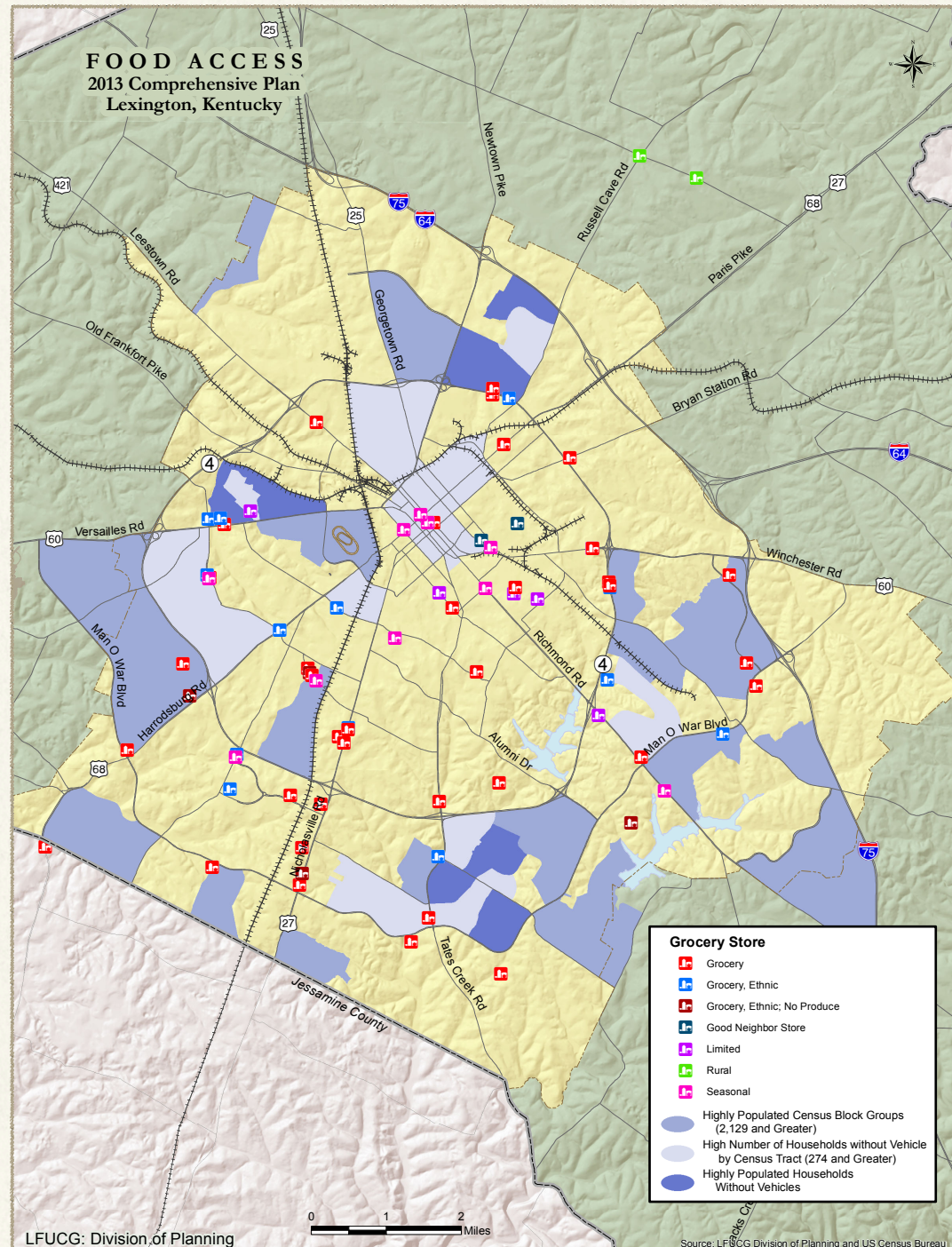
Desirable communities in Lexington possess a number of characteristics, including access to transportation, jobs, and quality food. Where large numbers of citizens do not have cars and good affordable food is not easily accessible, individual health and neighborhood stability are compromised. Unhealthy people, poverty, and increased crime are common companions. It can be useful to evaluate these issues through a small area plan.

The communities described in this section have higher than common poverty rates, lower than common access to cars and reduced access to quality food. Major grocery retailers select their sites based on many marketing factors, with one being a sufficient spending population at a certain income level. Spending habit data is usually collected and analyzed from credit card use. In areas where credit cards are not as prevalent, it may be difficult to show there is sufficient household income to support a grocery store. In other cities, an agency, such as a Community Development Corporation, has been necessary to coordinate information and financing to attract retail and other useful services to an area. A new grocery store in an underserved area provides access to fresh food and jobs.

Efforts to strengthen other areas in Lexington with challenging socioeconomic issues have been reviewed through the [2009 Central Sector and East End Small Area Plans](#).

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Map 3.2 Food Access



Winburn, Green Acres, Hollow Creek, Breckenridge

This area has a high number of households with no vehicle, large household populations, and is among the highest in Lexington with households living below the national poverty level. A number of underutilized properties in the Winburn neighborhood are zoned and have infrastructure for retail development, but lack a full-service grocery store. Connectivity is incomplete for cars and pedestrians between the neighborhoods and the arterial roads.

According to the 2010 Census there were 128 vacant housing units in Winburn. Housing vacancy, available housing stock, housing affordability, vacant land use recommendations, and food access and other services could be addressed by a small area plan.

Winburn already has many components of a neighborhood center, including a park, school and churches within walking distance. An emphasis on creating a sense of place by incorporating and enhancing a public gathering place within the Winburn neighborhood among the non-residential uses, especially access to food, may help revitalize this neighborhood and decrease the housing vacancy. Connectivity to the southern neighborhoods and arterial roads is important to support any residential uses in Winburn.

Cardinal Valley, Oxford Circle, Versailles Road, West Side of Red Mile Road

The Cardinal Valley area has a large number of households with no vehicle, high household populations, and high poverty. The grocery store on Village Drive is more than a one-mile walk around a cemetery for the nearest residents and much farther for others.

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Oxford Circle is a commercial area that has several small vacant parcels and underutilized parking lots, but excellent connectivity to the streets in this neighborhood. Even though this commercial area is bisected by a floodplain, it appears there could be development opportunities.

While there is high population density, a portion of this area has a high level of housing unit vacancy. There appear to be opportunities for transit-oriented development and for neighborhood center improvements, such as a public plaza or park.

Areas south of Versailles Road and west of Red Mile Road include a high number of residents living below poverty level and a moderately high number of households with no vehicles. Much of this population is college students, so lower income would be expected. It also includes social service agencies and assisted housing. The **Red Mile Development Plan** proposes retail within the mix of uses which could provide grocery access for this area, especially for pedestrians. The area west of Red Mile Road, therefore, should be included with the Carinal Valley area for targeted planning.

Centre Parkway, Gainesway, Armstrong Mill

This area bounded by Tates Creek Road, New Circle Road, Alumni Drive, and Man o' War Boulevard includes neighborhoods ranked high for households with no vehicle, high density households, and moderately high poverty. There is no easy access to the closest grocery store for many of the residents.

There are numerous churches in this area as well as parks and schools. There is very little vacant land or property inventoried as underutilized; however, there are a number of non-residential

buildings and open/green spaces. A small area plan would look for impediments to local commercial development. With the schools, churches and parks, there is potential to create a walkable transit-oriented neighborhood center.

Corridor and Buffer along Citation Boulevard

Nearly every household in this area has a car, which improves access to quality food for the 12,000 people who live here. There are prominent parcels along the Citation corridor at Leestown and Georgetown Roads that have remained vacant and underdeveloped despite their commercial land use designations. There is very little poverty in the area.

There are a number of churches, schools and other non-residential uses such as employment and retail in the area. Masterson Station Park is minimally accessible to the adjacent via greenway trail. Opportunities may exist to create one or two neighborhood centers or one larger community center, and the inclusion of a major grocery store located at a site centrally located to the residential development.

Recommendations for new Small Area Plans

- ❖ Centre Parkway, Gainesway, Armstrong Mill
- ❖ Winburn, Green Acres, Hollow Creek, Breckenridge
- ❖ Cardinal Valley, Oxford Circle, Versailles Road, West side of Red Mile Road
- ❖ Proposed and existing Citation Boulevard corridor and buffer

Chapter 4

PROTECTING THE ENVIRONMENT

Why do we value our natural environment?

What is Green Infrastructure?

**How will Lexington protect its natural resources
in an urban environment?**



PROTECTING THE ENVIRONMENT

An Environmental Impact

A community that values its natural environment and iconic landscapes is one that commits to grassroots stewardship and public policies that conserve natural resources and preserve and improve the natural surroundings. More succinctly, in a variation on the ethic of reciprocity, Kentucky's Wendell Berry advises us to

*“Do unto those downstream
as you would have those upstream do to you.”*

Lexington depends on its natural environment. Our urban area is surrounded by thousands of acres of farms and natural lands, a result in part of steadfast policies that measure when - or if - our rural area will be developed for something else. We have lived the consequences of building in floodplains and seeing the damage downstream. We deferred maintenance of sewage lines that resulted in waterway pollution.

Lexington is increasingly becoming more environmentally conscious. We are starting to build green infrastructure principles into our infrastructure planning. We create tree protection areas, construct rain gardens, ride on shared use trails, and naturalize riparian areas. We know that clean fuels and reduced fuel usage result in cleaner air.

Green infrastructure is an interconnected network of landscapes and natural resources that contributes to environmental health and the health and quality of life for the citizens of Lexington. The 1994 Greenspace Plan says greenspace includes the resources, linkages, and sites that contribute to the Bluegrass identity. Green Infrastructure, therefore, includes both cultural and natural features, with our scenic

rural landscape types, including the Palisades and other rural natural areas, urban parks, downtown, and historic neighborhoods. Our natural resources are composed of the plants, animals, soil, and water that make our landscapes unique.

Sound Planning and management of green infrastructure benefit the overall economy, environment, and community. The sustainability of our landscapes and natural resources, therefore is inextricably linked to our community values and needs.

How does protecting the environment benefit Lexington?

- ❖ Enables clean air and water
- ❖ Reduces the cost and impact of flooding
- ❖ Improves individual health and quality of life
- ❖ Ensures a clean and reliable source of water
- ❖ Regulates climate

What does the 2013 Comprehensive Plan recommend?

- ❖ Follow the recommendations of Empower Lexington.
- ❖ Increase transit options and street connectivity.
- ❖ Incorporate green infrastructure principles into gray infrastructure projects.
- ❖ Improve water quality by implementing the Capacity Assurance Program.

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Air Quality

Clean air is necessary for good health, especially for children, the elderly and people with chronic breathing issues. Air pollution is a collective term for many types of airborne contaminants, but the major focus of most pollution reduction efforts focuses on ground level ozone, particulate matter (both coarse and fine), oxides of nitrogen, and other greenhouse gases such as carbon dioxide and methane. These pollutants have been shown to adversely affect human health and welfare and are produced by fuel burned to generate electricity, vehicular emissions, nitrogen-based synthetic fertilizers, landfills and fermenting livestock waste.

Exhaust from motor vehicles creates about one-third of our air pollutants. Fayette County has been in attainment for Federal air quality standards since 2006 for the six criteria pollutants established through the Clean Air Act. Although Lexington is currently meeting Federal standards, data show that Lexington is close to exceeding the thresholds of two of the standards. The pollutants of most concern are ground level ozone and particulate matter. The Lexington Area Metropolitan Planning Organization (MPO) monitors these pollutants in the summer months to alert citizens of potential unhealthy levels. Ground level ozone formation occurs when hot, sunny weather and stagnant air patterns mix with various pollutants.

In 2011, the three-year average reading for ozone in Fayette County was 0.069 parts per million (ppm), which is comfortably below the standard of 0.075 ppm. The very hot summer of 2012, however, produced high ozone readings, with several readings above 0.080 ppm, which resulted in the MPO issuing three ozone alerts. It is possible

that the Fayette County air quality monitor readings will exceed the ozone standard if summer weather patterns continue as in 2012. Similarly, particulate matter pollution readings, although not as dependent on weather factors, have been near the Federal standard of 12 micrograms per cubic meter (ug/m³). In 2011, the three year average for the Fayette County monitor was 11.2 ug/m³.

All the Division of Waste Management refuse fleet now uses biodiesel fuel. In 2012, the Division purchased two electric trucks to collect recyclables and waste from downtown containers. By late spring 2014, LFUCG will have five to six refuse trucks that are fueled with compressed natural gas power. Compressed natural gas is the cleanest burning fossil fuel. CNG emits 6 to 11 percent lower levels of greenhouse gases than gasoline. It can reduce vehicle maintenance cost by 40 percent. As a fuel, CNG is 15-50 percent less than gasoline. There are little to no emissions during refueling.

Good transportation and land use planning contribute to the environmental health of Lexington. Bicycling, walking and public transit are energy-efficient means of travel that reduce emissions. A network of connected streets reduces total travel distances and time spent traveling or sitting in traffic, which results in reduced emissions. Transit-oriented retrofits for existing developments enable bus access and ridership throughout Lexington.

Energy Usage and *Empower Lexington*

After months of community input and consideration, the Urban County Council adopted [Empower Lexington](#) in 2012. The goal of Empower Lexington is for Lexington to become a more sustainable

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and resilient community by reducing energy use by one percent a year. The Plan recommends numerous best management practices to reduce energy consumption and emissions for the transportation, industrial, agricultural and waste sectors, as well as residential and commercial uses.

The Empower Lexington Plan is voluntary so community participation will depend upon citizens, businesses, industries and institutions embracing the recommendations in order to reach the goal. Increasingly, citizens-based stewardship provides a role in improving, conserving and maintaining environmental health.

Transportation. Transportation practices include increasing transit service (local and regional) and developing a comprehensive bicycle and pedestrian infrastructure network. Additional recommendations include increasing ridesharing and vanpooling, pursuing highway projects that reduce congestion such as roundabouts and signal timing improvements, encouraging the use of alternative fuels that pollute less and using more energy efficient vehicles.

Buildings. Best Practices for buildings include sustainable and green building designs, such as building orientation and green roofs, natural lighting and high efficiency heating and cooling systems. Individuals can adopt a variety of low-cost practices to reduce energy that include installation of new appliances, programmable thermostats and better insulation.

Land, Food, and Agriculture. Trees and vegetative cover facilitate carbon sequestration, a natural process of capturing and storing

carbon dioxide from the atmosphere. Forested land sequesters 1.3 tons of carbon dioxide per acre and agriculture cropland sequesters 0.05 tons per acre.

Waste. The Empower Lexington Plan and the [5-year Update of the Area Solid Waste Management Plan](#) recommend Lexington pursue a goal of zero waste. This recommendation is based on the premise that waste should be viewed as a resource to be managed, that was transportation uses energy and creates emissions and landfills generate methane, which is a potent greenhouse gas. Waste reduction practices include developing a comprehensive program to promote the benefits of organic waste, more reuse, and composting.

Green Infrastructure Network

A green infrastructure network is composed of hubs and corridors. Hubs are areas that provide sufficient space for green infrastructure to flourish and function properly. They include sites such as natural areas, working lands, parks, and urban greenspace. Corridors serve as biological, migratory and recreational channels that connect hubs. They include greenways and some transportation and utility corridors. An interconnected network of hubs and corridors increases the number of services and benefits they provide.

The hubs and corridors concept was introduced in the [1994 Greenspace Plan](#) which recommended a greenspace system that includes resources, sites and linkages for both urban and rural greenspace. A green infrastructure network takes the concepts from the greenspace plan and other plans to the next level by elevating hubs

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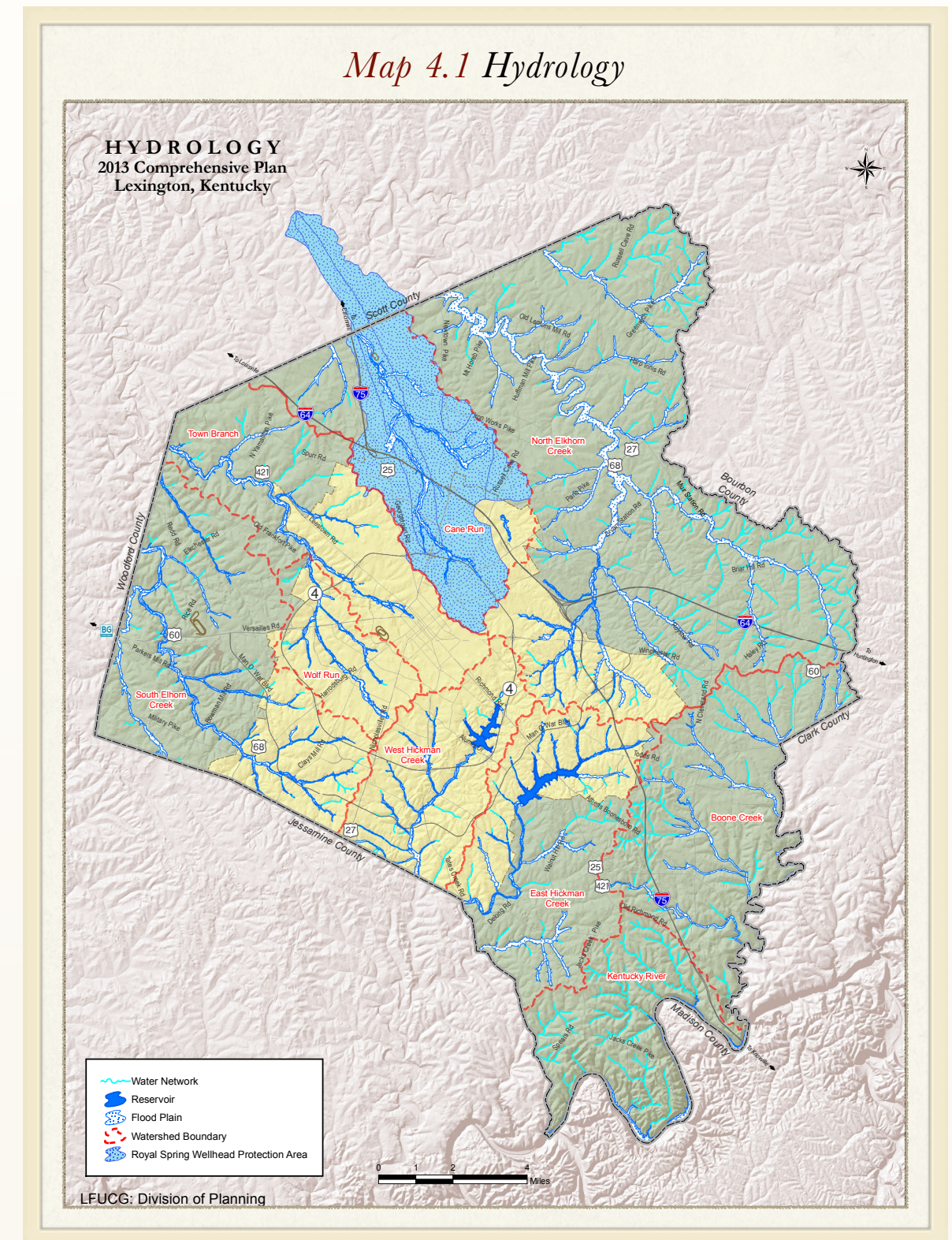
and corridors to *infrastructure* status, and integrating them into strategic planning, management and funding decisions.

LFUCG conducted a preliminary inventory of green infrastructure components. The next step is to complete and update the inventory and analyze it for gaps in the network, and for opportunities and barriers. Environmentally sensitive areas and geologic hazard areas are subsets of the natural resources mentioned in the Subdivision Regulations for attention, but are not limited to steep slopes, sinkholes, poor soils, wetlands, aquifer recharge areas, floodplains, improper fills, and significant trees and tree stands. Geologic hazard areas include areas of excessive flooding, clusters of sinkholes, cliffs and caves near the surface.

Soils

Unlike most large cities, Lexington is not located on a major body of water, nor are there expansive forests or mountaintops to protect. Our most significant natural asset is the rich, fertile soil that sustains a thriving agricultural industry. Originating from the underlying Lexington limestone, the fertile soils and mineral-rich water have been integral to the diversity in crop, equine, and livestock farming since the area was settled.

As rising population increasingly places demands on U.S. farms for food, the preservation and conservation of the best soils is imperative for food security. Fayette County is positioned well for the future demand. In the rural area, 88 percent of the land is prime soils (58 percent) or soils of statewide significance (30 percent). Of the 29,275 acres in conservation easements (26,457 in PDR), 89 percent are



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considered prime of soils of statewide significance.

Erosion control is an essential component of protecting soil resources. All levels of government regulate erosion, particularly for water quality. The [Fayette County Conservation District](#) assists farmers in efficient methods of soil erosion prevention. At the Federal level, farms participating in USDA programs must comply with [The Highly Erodible Land and Wetland Conservation](#) rules.

Water Resources

The Inner Bluegrass is characterized by springs, caves, and sinkholes prevalent in karst geology. In Fayette County, there are 11,256 acres of FEMA regulated floodplain, of which 6,230 acres are within the Urban Service Area. There are nine watersheds in Fayette County, with Kentucky River and Boone Creek watershed located exclusively within the rural area. Headwaters for the streams within the other seven watersheds originate inside the Urban Service Area.

Like other cities of similar size, major pollutants of concern in Lexington are nutrients, pathogens and sediment. In addition, some stream segments lack suitable habitat and insects support a fish population. Streams have been assessed by the [Kentucky Division of Water](#) to determine if they support designated uses for recreational contact, fish consumption, drinking water, and aquatic habitat. All nine watersheds have streams not meeting full support for at least one use. Town Branch improved from non-support in 2008 to partial support for warm water aquatic habitat in 2010.

Consent Decree and CAP

In 2011, LFUCG entered into a Consent Decree with the U.S. EPA and the Commonwealth of Kentucky to resolve violations of the Clean Water Act associated with LFUCG's sanitary sewer and storm sewer systems. The Consent Decree requires LFUCG to implement infrastructure projects and maintenance programs to reduce the number of sanitary sewer overflows. The LFUCH Division of Water Quality has identified \$590 million in improvement projects to be constructed over the next 11-13 years, including replacing sewer lines, constructing wet weather storage facilities, constructing new pump stations and upgrading the two treatment plants.

A significant component of the Consent Decree is the Capacity Assurance Program. The CAP was developed over several months by community leaders and elected officials as a way of managing access to the sanitary sewer system. Through a combination of capacity credits and system improvements, greenfield and infill development will be able to continue, but at a monitored and measured pace.

The Consent Decree and LFUCG's Municipal Separate Storm Sewer System (MS4) permit with the Commonwealth require LFUCG to implement a comprehensive Stormwater Quality Management Program (SWQMP) to reduce the discharge of pollutants from the MS4 into Fayette County streams. LFUCG began implementing the SWQMP in 2008, which involves developing programs and operational procedures to address the following areas:

- ❖ Watershed Management
- ❖ Public education and involvement
- ❖ Illicit discharges

PROTECTING THE ENVIRONMENT

- ❖ Construction sites
- ❖ New development and redevelopment
- ❖ Municipal operations
- ❖ Industrial facilities
- ❖ Water quality monitoring

Impervious surfaces, such as roofs, parking lots, and driveways, do not absorb water when it rains. During rains, impervious surfaces, exacerbate stormwater runoff that moves quickly, which leads to flooding, water pollution, and erosion problems.

In the Urban Service Area, 37 percent of the land area is impervious surface. Receiving streams are considered *degraded* in urban watersheds with more than 30 percent impervious surface and *impacted* for 10 to 30 percent impervious. The Wolf Run watershed is contained entirely within the Urban Service Area and has 39 percent impervious cover. The West Hickman watershed is 93 percent within the USA and has 40 percent impervious cover.

Water Protection

New ordinances were adopted in 2009 and 2010 to improve water quality by addressing maintenance of privately-owned stormwater controls, erosion and sediment control, illicit discharges and illegal connections, enforcement, and industrial and high risk commercial stormwater runoff.

[The LFUCG Storm Water Management Low Impact Development Guidelines for New Development and Redevelopment](#) was developed in 2012 as a supplement to the Stormwater Manual to promote the

use of best management practices, such as pervious surfaces, bioswales, and rainwater harvesting to minimize impervious area and runoff.

Additional regulations related to water quality are in the [Stormwater Manual](#) and [Article 19 of the Zoning Ordinance](#). Guidelines are available for retaining spills at gas stations and other protective measures, depending upon the type of business.

Fayette County's drinking water source is the Kentucky River, with intake pools and treatment plants in Fayette County and Owen Counties. The [20-Year Comprehensive Water Supply Plan](#) recommends that the Kentucky River and its tributaries should be protected from dumping, discharges, spills and undesirable development for a minimum of one mile upstream of the intake pools.

The Royal Spring Aquifer is the source of Georgetown's drinking water. Eighty percent of the aquifer recharge area is in Fayette County, which includes 1,624 acres of the Cane Run Watershed and extends to Seventh Street near downtown. The [Royal Spring Aquifer Wellhead Protection Plan](#) calls for appropriate containment of runoff from development in the recharge area.

Wetlands area regulated under the U.S. Army Corps of Engineers General Permits. An area as small as a half acre may be subject to individual permitting requirements before it can be dredged, filled, or modified. A precise delineation in the field is warranted for permit applications.

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Environmentally sensitive and geologic hazard areas are governed by the **Subdivision Regulations** and Division of Engineering **Technical Manuals**. Developers note this information on the **Environmental Routing Form** for development plan applications.

To protect streams on farms larger than 10 acres, the Kentucky Division of Water requires an Agriculture Water Quality Plan. It uses National Resource Conservation Service standards for nutrient loads and recommends best management practices.

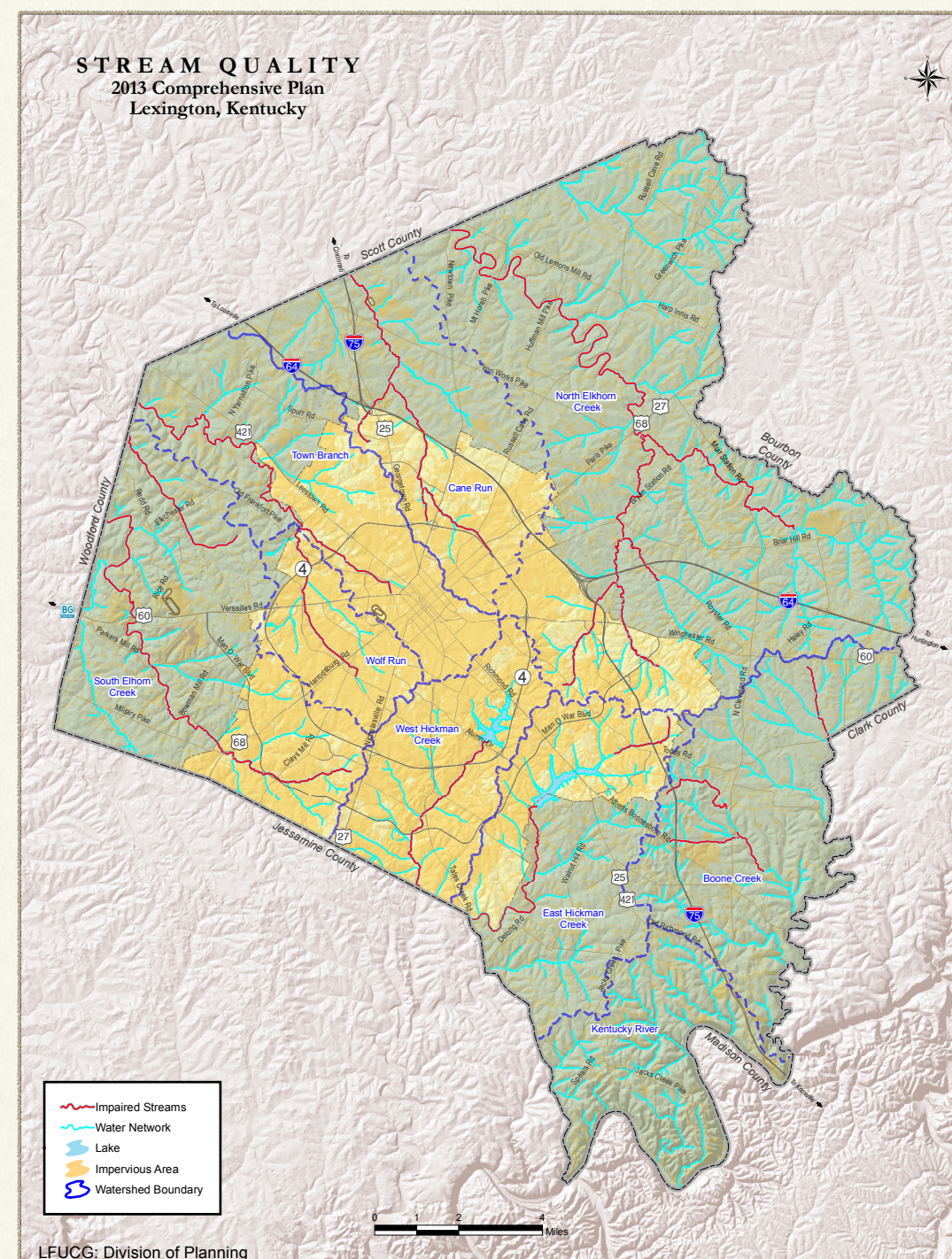
The Stormwater Manual sets a no-mow zone for a minimum 25 feet from all stream bank to protect water quality from erosion and improved infiltration. Other measures to protect water quality include street sweeping in the urban area, measured and reduced use of road salt, a no-mow policy along stream banks, litter control, reforestation of riparian buffers, and public education.

Pollutants from street runoff impair water quality. The recommendations of the draft Complete Streets Manual would help reduce stormwater runoff through reduced pavement. It also advocated for low impact development practices for stormwater runoff where appropriate.

Conservation Greenways

The **Greenway Master Plan** designates streams, floodplains, riparian vegetation, and associated environmentally sensitive or geologic hazard areas as conservation greenways to improve water quality, provide wildlife habitat, and control flooding. There are about 110 miles of stream and tributaries in the Urban Service Area. State and

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local governments manage 26 percent of the total urban stream mileage and another 14 percent is scheduled to be acquired by LFUCG in the future with new development. The remaining 60 percent are in private ownership.

There are 869 acres of floodplain owned by LFUCG, of which 719 acres are in the Urban Service Area. Property management is primarily divided between:

- * Division of Engineering - 36 acres
- * Division of Water Quality - 167 acres
- * Division of Parks and Recreation - 404 acres (150+ rural acres)

The remaining 112 acres of LFUCG floodplain are on other LFUCG properties or in easements. An additional 164 acres of floodplain have been recorded on plats for LFUCG to acquire while another 370 acres of floodplain and proposed trail routes within the Urban Service Area have been identified as public greenways.

All greenways provide open space. Seventy percent of LFUCG greenways provide multiple benefits from a combination of natural resource protection, transportation, or recreational service and stormwater management. Currently, 814 of the 869 acres under LFUCG ownership are intended to be managed for conservation. 590 acres include an existing or proposed trail and 111 acres have a stormwater component (basin).

Combining existing with recorded plats and future greenways, there is potential for 1,400 acres of LFUCG greenways, of which 1,000 acres could function as both conservation and trail greenways.

Other owners of conservation greenways in the Urban Service Area include:

- * Homeowners' association - 186 acres
- * Public or private schools - 13 acres
- * State government - 7 acres (+403 rural acres)
- * Future development not designated for LFUCG ownership - 246 acres
- * Floodplains on private property - 934 acres

LFUCG is attempting to re-establish vegetation in its own riparian zones by removing invasive species and replanting with natives, Reforest the Bluegrass events, and natural succession. Since 2003, LFUCG has selected one greenway each year for a restoration project, totaling 58.5 acres at a restoration and maintenance cost of over \$1.3 million.

In the future, partnership with outside groups must be part of the solution. For example, in 2012, the Friends of Wolf Run matched a \$78,000 award for projects and maintenance in the Wolf Run watershed with volunteer time. Since 2009, neighborhood groups, schools, and nonprofit and religious organizations have been awarded nearly \$1 million for environmental grants in greenways through various programs.

Better coordination between Divisions and uniform and efficient management of greenways would be addressed with the creation of a Greenway Program and the adoption of the draft Greenway Manual. The Greenway Program's staff would be responsible for implementing

PROTECTING THE ENVIRONMENT

the [2002 Greenway Master Plan](#) and would be the point of contact for greenway matters. The program would include the critical components that are currently lacking for public education and information, outreach and volunteer coordination.

The [Expansion Area Master Plan](#) proposed that stormwater management facilities be located in floodplains that are dedicated as greenways to LFUCG or placed in conservation easements. Besides conservation and stormwater management, the greenways in the expansion area provide public open space and a unifying link for residents to parks and commercial areas.

The 2002 Greenway Master Plan further expanded floodplain protection by designating all urban 100-year floodplains and rural stream buffers in Fayette County as conservation greenways. Since then, greenways in large new developments in the non-Expansion Urban Service Area have been owned and managed by either LFUCG or homeowners' associations.

The draft Greenway Manual calls for a Management Plan to be developed for each LFUCG greenway. The Management Plan will establish goals and strategies for each greenway.

Plants and Animals of the Region and their Habitats

Located along the Kentucky River, the 732-acre Raven Run and 287-acre Floracliff Nature Sanctuaries preserve native vegetation, including rare plant species. This upland wooded area is also where more conservation efforts by private property owners have occurred. In the last 10 years, the Kentucky Division of Forestry helped Fayette

County landowners prepare 64 Stewardship Plans covering 4,545 acres, including planting 114 acres in trees and 207 acres in timber stand improvements, mostly through invasive species eradication.

In the Rural area, trees are predominantly along fence-rows, property boundaries, creeks, and roads. The urban forest is primarily found along streams, in street rights of way, and in natural areas. Potential locations for wildlife habitat and natural areas, springs, caves, and urban stream corridors. Satellite data shows no significant forest cover except what is adjacent to the Kentucky River Palisades. Extensively wooded, the Kentucky River corridor and tributaries support a diversity of plants and wildlife. Inside the Urban Service Area, restoration efforts at the 26-acre McConnell Springs Nature Park protect plants, urban wildlife, and the unique geological, historic, and cultural resources on the site. Other urban areas with significant plant life or habitat include:

- * The [Arboretum](#) on the campus of the University of Kentucky is the State Botanical Garden and features a diverse and unique collection of native plants and wildlife habitats throughout its 100 acres of gardens, woods, and wetland.
- * [Lexington Cemetery](#) has mature trees and expansive gardens that provide habitat and attract bird populations at its 170-acre site.
- * Public golf courses at Tates Creek, Kearney Hills, and Lakeside are [Certified Audubon Bird Sanctuaries](#). Meadowbrook Golf Course is seeking certification.
- * Reservoirs support waterfowl during winter.
- * Naturalized areas have been restored with native species or left natural and un-mowed to enable natural succession.

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Pockets of natural areas have limited ecological value due to their isolation, small size, or configuration. Corridors connecting natural areas could increase plant productivity, biodiversity, and range for larger animals to travel. Corridors can include streams, utility lines, and rail lines. With 60 percent of Lexington's urban stream miles extending through residential property, managing stream banks for the benefit of native plants and animals is challenging.

Remainders of small, isolated woodlands may merit protection or rehabilitation, if established criteria are met. Criteria may include size, location, and condition of the stand. While value for habitat is limited, small stands may provide other environmental as well as social and economic benefits, such as an increase in overall canopy coverage. Tree stands increase in ecological value if they are linked to other natural areas by a natural corridor.

Street trees are required for new developments and in redevelopment of residential and commercial properties to meet tree canopy coverage goals, according to [Article 26 of the Zoning Ordinance](#). The Ordinance describes protection measures to be used during development for significant trees, riparian zones, greenways, environmentally sensitive areas, historic turnpike trees, perimeter trees and tree stands.

Invasive plant species are a serious issue throughout Fayette County, especially when they invade areas that are already restored. The Emerald Ash Borer beetle, which entered Fayette County in 2010, poses a serious threat to the urban forest. It is expected that within five years, untreated ash trees will not have survived the infestation.

LFUCG has directed its resources to protecting the significant Blue Ash trees in public parks.

Raven Run, Floracliff, and McConnell Springs each has a management plan to combat invasive plants, such as Japanese bush honeysuckle. Management plans for natural resources and wildlife for other LFUCG properties should be developed. An effective management plan would inform budgetary decisions for funding the management of public properties in the context of a green infrastructure network and services.

In Fayette County, the U.S. Fish and Wildlife Service list one mammal, the Indiana Bat, and one plant, Running Buffalo Clover, as endangered and protected by law.

Topography Protection

According to the [Subdivision Regulations](#), land over 15 percent gradient is considered steep and requires an assessment for possible geotechnical modifications prior to construction. The Regulations may need to be reviewed to ensure that they adequately protect steep slopes and potential erosion sites, especially where small lots are proposed or the lots are adjacent to environmentally sensitive or geologic hazard areas. The Subdivision Regulations state that developments should preserve landforms and follow contours.

Recommendations for new policies

- ❖ Incorporate green infrastructure principles into gray infrastructure projects as roads, utilities, and buildings are constructed, replaced, or repaired.
- ❖ Update the green infrastructure inventory and analyze it for gaps in the network; identify opportunities to improve network coverage and linkage.
- ❖ Restore greenways and improve water quality of streams by naturalizing stream corridors.
- ❖ Pursue partnerships with schools, service agencies, business, and citizen groups for greenway maintenance and projects
- ❖ Establish a Greenway Program and adopt the Greenway Manual (draft) in order to provide consistent and efficient management of LFUCG greenways and to implement the Greenway Master Plan.
- ❖ Review and update the Subdivision Regulations to ensure there is adequate protection for steep slopes and building sites subject to erosion and to identify barriers to preserving landforms.
- ❖ Establish criteria for evaluating small woodlands for protection or rehabilitation.

Chapter 5

CREATING JOBS AND PROSPERITY

How does Lexington stand out as a destination of choice for job creators and a talented work force?

What are the community strategies for creating jobs?

What are our economic strengths that we can support and showcase?



CREATING JOBS AND PROSPERITY

“One of the most important studies of any community is that of its economic base,” begins Lexington’s [1949 Master Plan](#). “The broad purpose of the Master Plan is to further the desirable future development of the community and to contribute thereby to the physical and social well-being of its people.” The 1949 Plan recommends that land use decisions be attuned to the community’s economic objectives, an approach that rings familiar 64 years later.

In the best of times, the need for jobs and economic development remains central to community planning efforts. From the national to local levels, political and business leaders, research economists, and various pundits proffer their solutions to creating jobs and prosperity. In Lexington, there has been no shortage of planning for jobs. Two active efforts sanctioned by the Urban County Council seek to improve wages and jobs, with one being community-based and the other informed by an international research institution. A 2013 comprehensive study of agriculture’s contributions to Fayette County’s economy reminds us of why we so rigorously guard our irreplaceable soils and farms. A review of Census and economic data sobers us to the realities of the working poor and how economic prosperity remains elusive for some.

The 2013 Comprehensive Plan brings to the discussion recommendations for actions that will give the community more tools to help craft solutions to our jobs need. This chapter is particularly apt for leaders charged with making land use recommendations. Before a rural farm is recast for urban development; in consideration of a finite amount of jobs land; looking at the economy of today and tomorrow, our community must understand what sets Lexington apart as a

place to work - what kind of jobs we will need in the future and what kind of prosperity we want for our citizens.

The 1949 Master Plan continues: “Tobacco is the most important crop in the economy and the Lexington market for loose-leaf burley is the largest in the world.” While this statement is long past its relevance, the 1949 plan still speaks to today: “The value of the horse industry is not only in sales but also because it attracts thousands of tourists who visit horse farms, shows, and races, and bolsters the retail trade and service of the area.”

What will lead to prosperity in Lexington?

- ❖ Knowledge, understanding, and application of economic data and principles
- ❖ Promotion of local assets for job creation, including the agricultural cluster
- ❖ Reduction of poverty

What does the 2013 Comprehensive Plan recommend?

- ❖ Implement existing economic and jobs plans.
- ❖ Develop a comprehensive food strategy for jobs and food security.
- ❖ Become a leader in broadband infrastructure.

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Jobs Plans

Over the past four years, the Urban County Council has sanctioned two prominent efforts to improve the prosperity of Lexington:

Destination 2040: Choosing Lexington's Future and BEAM - Bluegrass Economic Advancement Movement.

Destination 2040 was a community effort that created a comprehensive vision for Lexington to address four critical aspects of community life, including **Economic Expansion**.

In May 2009, the Urban County Council adopted the value statements of ***Destination 2040***, which describe Lexington as a “fertile field of opportunities, where taking advantage of key strengths and exploring creative new endeavors will benefit all its people.” This includes community elements for commerce and employment, and producing and keeping a well-educated and well-paid work force.

The community elements described in *Destination 2040* include:

- * New of existing business expansion
- * Stable employment and adequate wages
- * Agricultural industry
- * Workforce training and education
- * Stabilization of government revenues
- * Regional cooperation
- * Institutions of higher education as economic engines
- * Business recruitment strategies and methods
- * Entrepreneurship and innovative partnerships and programs
- * Generating new markets for products

The action approaches for the top four community elements of *Destination 2040* include:

- * Revamp the existing tax structure to encourage business development and ensure more local control over tax revenues. Review available revenue streams and seek to implement a more progressive and effective system of taxation.
- * Recognize and expand the University of Kentucky's research and development as the primary driver for business and job expansion in the community.
- * Expand opportunities for workers to receive training and become more highly skilled to promote their upward mobility in the work force.
- * Attract people who will build and sustain skilled trades and white collar businesses by ensuring the presence of a strong active cultural arts scene.
- * Develop permanent school-based staff positions dedicated to linking students from preschool to college levels with skilled trades and knowledge-based companies.
- * Coordinate the cluster of equine-related entities into a more identifiable economic development entity.
- * Work with agri-business entities, financial consultants, and state and local governments to create and maintain a competitive tax structure for the agricultural industry.
- * Connect with non-resident horse farm owners and encourage them to do business in Lexington.
- * Generate a larger, sustainable agri-business workforce pool.
- * Expand financial incentives to businesses that provide opportunities to their workers to receive training and become more highly skilled to promote their upward mobility through the work force.

CREATING JOBS AND PROSPERITY

BEAM

In November 2011, the Urban County Council approved a Resolution endorsing and supporting the Bluegrass Economic Advancement Movement (BEAM) that urges members of the Lexington and Louisville communities to fully participate in the project as an opportunity to further the collective goals of both cities as economic engines for all of Kentucky.

Lexington Mayor Jim Gray and Louisville Mayor Greg Fischer initiated [BEAM](#) to develop a joint regional business plan supporting the growth of high-quality jobs in advanced manufacturing.

With existing global manufacturers in both communities, including Toyota, Ford, Raytheon, Lexmark, GE, Lockheed Martin and more, the mayors believe there is a unique opportunity to create a *super-region* that can compete on a global scale.

The project will use the Brookings Institution's "Metropolitan Business Plan" framework to develop a comprehensive economic development effort designed to nurture and support manufacturers and their supply chains. The goals of this initiative are to transform the Bluegrass into a hub for advanced manufacturing that will create quality jobs and increase export activity.

A BEAM plan is being developed that will promote the region's assets, existing centers of excellence, central location, and quality workforce.

Tax Increment Financing (TIF)

Tax increment financing is a financing and development local governments to capture future increases in property and other taxes generated by new development within a specified development area. The captured value of the increase in tax revenues is used to attract private development or to finance public improvements for economic development projects.

A tax increment is the difference between the amount of occupational and property tax generated after creation of a development area. Taxing districts continue to receive the base tax amount while increments are used to fund the public costs of development.

TIF is primarily used to help local governments to jumpstart improvements in declining or underperforming urban areas where development would not otherwise occur. The "but for" test is often used to describe TIF-funded projects. "But-for" the TIF-funded public improvements, development would not occur.

Examples of public costs that can be funded by TIF include:

- * sewer expansion and repair
- * water supply, storm drainage
- * street construction
- * environmental remediation
- * park improvements
- * flood control
- * land acquisition
- * demolition and clearance work
- * utilities, landscaping
- * parking structures
- * street lighting, sidewalks
- * traffic control

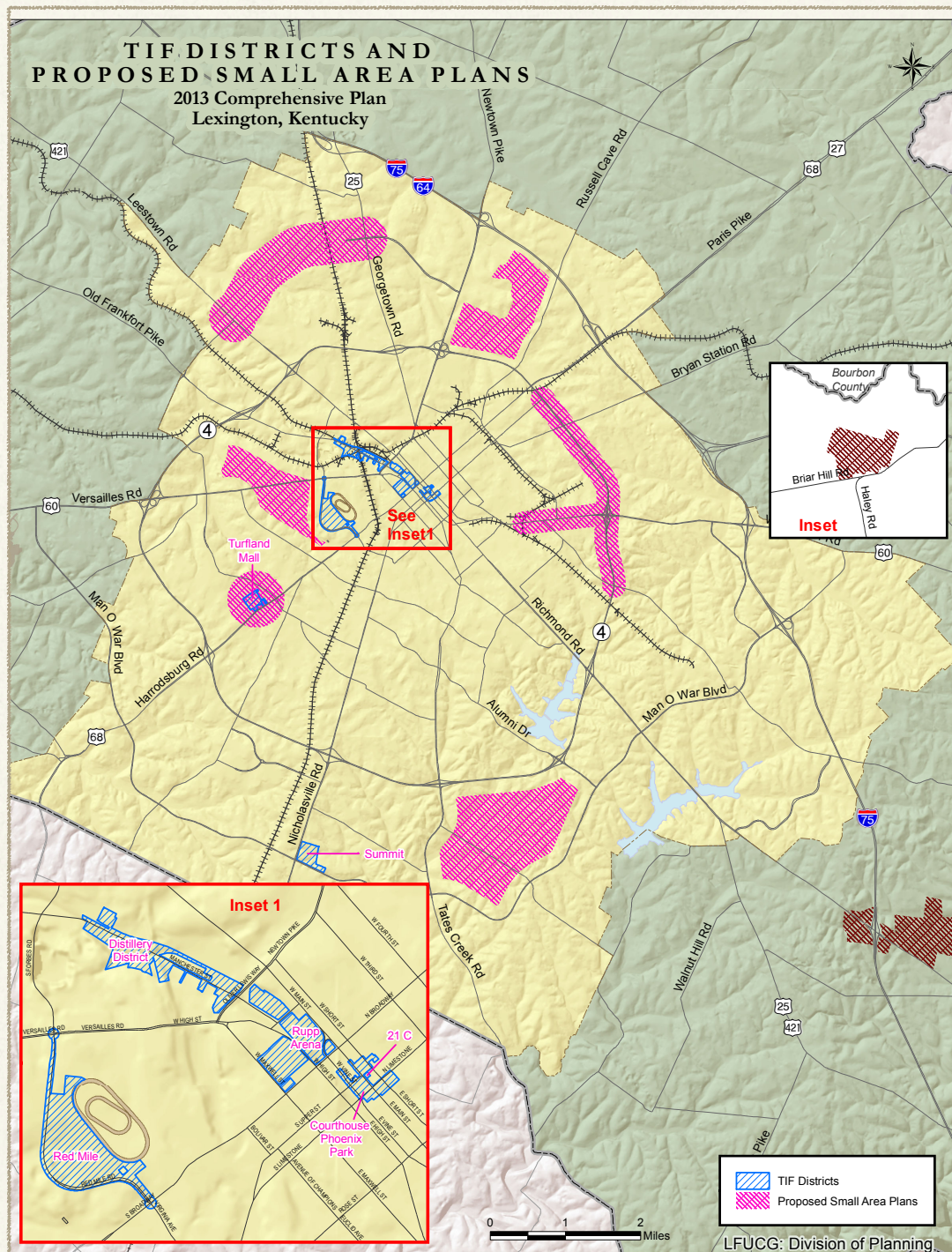
Kentucky's tax increment financing statutes, KRS 65.7041 -65.7087, establish guidelines for creation of development areas eligible for both local and state tax increments. **For information about Lexington's TIF projects, please see Chapter 2.**

Source: Kentucky League of Cities and

www.lrc.ky.gov/Statutes/chapter.aspx?id=37327

CREATING JOBS AND PROSPERITY

Map 5.1 TIF Districts and Small Area Plans



The Numbers

Lexington possesses many of the indicators of prosperity that are attractive to employers: Lexington has an educated workforce; vacant land designated for jobs; infrastructure that supports large employers and an entrepreneurial culture that supports small business. In particular:

- ❖ 88.5 percent of Lexington citizens are high school graduates or higher
- ❖ 39.3 percent have Bachelor's degrees or higher
- ❖ 69.5 percent of the population is in the labor force

These rates exceed the ones in surrounding counties and far exceed the rates in Kentucky. The college degree rate exceeds the U.S.

In addition:

- ❖ 1,500 acres of vacant land are designated for jobs
- ❖ 14 employers each employs over 1,000 people
- ❖ 8,000 small businesses each employs less than 500 people
- ❖ 5,500 of the small businesses employ fewer than 10 people

These favorable characteristics help account for Lexington's diverse employment base and low unemployment rate (6.5 percent in early 2013 -- consistently among the five lowest in Kentucky)

There are also questions about the numbers that should be addressed:

- ❖ What is the relationship between a larger labor force and low unemployment to higher poverty and lower median income?

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- ❖ What is the long-term impact in a decline in manufacturing and wholesale trade?
- ❖ How should Lexington respond to a growing professional and scientific community?

Poverty

Kentucky is the fifth poorest state in the country. The Lexington area is near the bottom of its benchmark communities for poverty.

Therefore, Lexington cannot ignore the causes of why some of its citizens are disaffected in a community with myriad opportunities for economic security. The history and causes of poverty, at both a global and regional scale, have been studied and parsed for decades, with progress towards amelioration through increased wealth and reduced costs.

The federal definition of poverty uses a set of money income thresholds that vary by family size. If a family's total income is less than the family's threshold, then that family is considered in poverty. For a family of four, the poverty line in 2012 was \$23,050. With a minimum wage of \$7.25 an hour, a two-parent family with two children, with one parent working full-time and the other working part-time would be impoverished. As noted in the following charts, a two-parent family with two children needs to earn \$37,481 a year (\$18.02/hour) just to cover their basic costs. In reviewing our typical hourly wages across various professions, most exceed the federal poverty level while falling well short of the wages required for the costs of living in Lexington. The population living in the gap between the poverty level and a living wage are those who may not be eligible for services or assistance, and thus tend to slide further toward the poverty level.

As a planning body, it is our obligation to address the land use-related issues that can assist families who find themselves impoverished or subsisting within the living wage gap, and work to provide greater opportunities to navigate to a better economic outcome, in part with access to:

- ❖ Affordable neighborhood child care
- ❖ Transit or transportation
- ❖ Education and job training
- ❖ Food that is affordable and nutritious
- ❖ Social and community services
- ❖ Jobs with higher wages

Just as land use planning policies that improve access to food, child care, medical services and transportation can help Lexington families reduce costs in the absence of rising wages, so too can the lack of action have a negative impact on families already struggling to cover these basic costs.

As such, we are now aware that poverty is not only in the urban core but in scattered sites outside New Circle Road. Two of the proposed small area plans - Centre Parkway and Winburn - are for areas that were developed primarily as single-family homeowner neighborhoods 40 years ago. Moderate to high poverty rates and low access to vehicles indicate that parts of these areas are compromised economically. It is important to know whether this is a trend and what impact this will have on households, housing ownership, and neighborhood stability and redevelopment.

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Living Wage Calculation for Lexington-Fayette, Fayette County, Kentucky

The living wage shown is the hourly rate that an individual must earn to support a family if she/he is the sole provider and working full-time (2080 hours per year). The minimum wage is the same for all individuals, regardless of how many dependents they have. The poverty rate is typically quoted as gross annual income. We have converted it to an hourly wage for the sake of comparison. Wages that are less than the living wage are shown in red.

HOURLY WAGES	1 ADULT	1 ADULT, 1 CHILD	1 ADULT, 2 CHILDREN	1 ADULT, 3 CHILDREN	2 ADULTS	2 ADULTS, 1 CHILD	2 ADULTS, 2 CHILDREN	2 ADULTS, 3 CHILDREN
Living Wage	\$12.75	\$24.69	\$32.30	\$41.91	\$17.75	\$20.93	\$22.32	\$26.12
Poverty Wage	\$5.21	\$7.00	\$8.80	\$10.60	\$7.00	\$8.80	\$10.60	\$12.40
Minimum Wage	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25
Source: Massachusetts Institute of Technology (www.livingwage.mit.edu)								

Typical Expenses

These figures show the individual expenses that inform the living wage estimate. Their values vary by family size and composition.

MONTHLY EXPENSES	1 ADULT	1 ADULT, 1 CHILD	1 ADULT, 2 CHILDREN	1 ADULT, 3 CHILDREN	2 ADULTS	2 ADULTS, 1 CHILD	2 ADULTS, 2 CHILDREN	2 ADULTS, 3 CHILDREN
Food	\$242	\$357	\$536	\$749	\$444	\$553	\$713	\$904
Child Care	\$0	\$433	\$738	\$1,042	\$0	\$0	\$0	\$0
Medical	\$112	\$337	\$357	\$341	\$236	\$332	\$311	\$321
Housing	\$492	\$729	\$729	\$980	\$591	\$729	\$729	\$980
Transportation	\$318	\$618	\$712	\$764	\$618	\$712	\$764	\$777
Other	\$66	\$157	\$206	\$272	\$120	\$156	\$177	\$206
Required monthly income after taxes	\$1,230	\$2,631	\$3,278	\$4,148	\$2,009	\$2,482	\$2,694	\$3,188
Required annual income after taxes	\$14,760	\$31,572	\$39,336	\$49,776	\$24,108	\$29,784	\$32,328	\$38,256
Annual taxes	\$2,361	\$5,039	\$6,269	\$7,945	\$3,840	\$4,750	\$5,153	\$6,107
Required annual income before taxes	\$17,121	\$36,611	\$45,605	\$57,721	\$27,948	\$34,534	\$37,481	\$44,363
Source: Massachusetts Institute of Technology (www.livingwage.mit.edu)								

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Typical Hourly Wages

These are the typical hourly rates for various professions in Lexington. Wages that are below the living wage for one adult supporting one child are marked in red.

OCCUPATIONAL AREA	TYPICAL HOURLY WAGE
Management	\$35.65
Business and Financial Operations	\$23.86
Computer and Mathematical	\$28.15
Architectural and Engineering	\$28.58
Life, Physical and Social Science	\$22.56
Community and Social Services	\$17.17
Legal	\$26.05
Education, Training and Library	\$21.42
Arts, Design, Entertainment, Sports and Media	\$16.23
Healthcare Practitioner and Technical	\$24.40
Healthcare Support	\$11.67

OCCUPATIONAL AREA	TYPICAL HOURLY WAGE
Protective Service	\$13.75
Food Preparation and Serving Related	\$8.57
Building and Grounds Cleaning and maintenance	\$9.44
Personal Care and Services	\$9.21
Sales and Related	\$10.05
Office and Administrative Support	\$13.33
Farming, Fishing and Forestry	\$10.78
Construction and Extraction	\$17.32
Installation, Maintenance and Repair	\$17.71
Production	\$14.73
Transportation and Material Moving	\$13.47
Source: Massachusetts Institute of Technology (www.livingwage.mit.edu)	

CREATING JOBS AND PROSPERITY

COMPARISON OF WORKFORCE ECONOMIC DATA FOR KENTUCKY AND ADJACENT COUNTIES									
Geographic Area	2012 Population	2011 Socio-Economic Data					2011 Workforce Population		
	Total Population Estimates	Median Household Income	Percentage Labor Force Unemployed (Feb. 2013)	High School diploma or higher	Bachelor's Degree or higher	Poverty Rate	Labor Force Participation Rate (age 16 and over)	Population 16 to 64	Population 65 and Older
Kentucky	4,380,415	\$42,248	7.9%	81.7%	20.6%	18.1%	60.5%	2,841,324	570,856
Bourbon County	19,978	\$42,192	8.3%	82.5%	16.0%	16.4%	61.7%	12,709	3,133
Clark County	35,787	\$45,726	8.2%	81.1%	18.2%	16.6%	61.8%	23,129	4,984
Fayette County	305,489	\$48,306	6.5%	88.5%	39.3%	17.9%	69.5%	206,671	30,546
Jessamine County	49,635	\$48,547	7.5%	84.7%	27.2%	16.3%	66.1%	31,857	5,342
Madison County	84,786	\$41,876	6.8%	84.2%	27.4%	20.3%	64.0%	57,372	9,061
Scott County	49,057	\$57,967	7.0%	86.8%	26.1%	13.4%	68.8%	30,796	4,264
Woodford County	25,077	\$55,124	5.9%	88.0%	30.4%	13.4%	67.5%	16,273	3,111
Source: 2012 U.S. Census; 2007-2011 American Community Survey 5-year Estimates; Kentucky Office of Employment Training									

CREATING JOBS AND PROSPERITY

COMPARISON OF 2011 WORKFORCE ECONOMIC DATA FOR BENCHMARK METROPOLITAN STATISTICAL AREAS									
Geographic Area	Population Estimates	Median Household Income	Percentage Labor Force Unemployed (Feb 2013)	High School diploma or higher	Bachelor's Degree or higher	Poverty Rate	Labor Force Participation Rate (age 16 and over)	Population 16 to 64	Population 65 and older
Ann Arbor, Michigan	344,727	\$59,737	5.5%	95.5%	53.1%	14.1%	65.8%	71.7%	9.9%
Athens, Georgia	190,978	\$40,951	6.3%	85.2%	35.7%	25.8%	59.3%	71.6%	9.9%
Boulder, Colorado	293,205	\$66,479	5.4%	94.0%	59.6%	13.1%	69.9%	71.5%	9.8%
Charlotte, NC	1,729,955	\$54,229	9.4%	88.6%	35.7%	13.3%	70.3%	66.8%	10.0%
Chattanooga, TN	523,711	\$44,164	7.4%	87.3%	27.8%	15.6%	63.6%	65.7%	14.5%
Cincinnati, Ohio	2,120,924	\$54,651	7.0%	90.8%	32.6%	12.6%	67.3%	65.8%	12.1%
Fort Collins, Colorado	296,107	\$57,215	5.8%	94.7%	45.1%	13.4%	69.8%	69.5%	11.6%
Gainesville, Florida	263,046	\$41,198	5.9%	91.5%	40.5%	23.2%	60.0%	73.0%	11.0%
Knoxville, Tennessee	692,803	\$46,666	6.5%	89.9%	30.8%	14.0%	62.9%	66.2%	14.5%
Lexington, Kentucky	466,479	\$49,226	6.2%	89.4%	35.6%	16.9%	68.1%	98.9%	11.0%
Louisville, Kentucky	1,273,988	\$48,820	7.7%	89.7%	28.7%	14.1%	66.2%	66.0%	12.7%
Madison, Wisconsin	564,128	\$61,163	5.3%	95.2%	43.9%	11.5%	73.6%	69.9%	10.7%
Nashville, Tennessee	1,569,470	\$52,347	6.2%	88.5%	32.1%	13.6%	68.0%	67.6%	10.6%
Oklahoma City, OK	1,238,050	\$48,498	4.7%	88.5%	29.0%	14.9%	66.4%	66.1%	11.7%
Raleigh, North Carolina	1,104,503	\$61,407	7.6%	91.1%	44.1%	11.2%	71.1%	67.7%	8.8%
Lexington MSA includes Fayette, Bourbon, Clark, Jessamine, Scott and Woodford Counties Sources: Total Population and Population by Age - 2011 American Community Survey (ACS) 5 year estimates, table DP05; Unemployment - U.S. Dept. of Labor, Bureau of Labor Statistics Feb. 2013; Median Household Income, Poverty, and Labor Force Participation Rate - 2011 ACS Estimates, table DP03; Educational Attainment - 2011 ACS 5 year estimates, table B23006									

CREATING JOBS AND PROSPERITY

The Industry by NAICS (North American Industry Classification System) category table shows total employees in each industry group. The green highlights show the top industries with the highest increase in total number of employees. The pink highlights indicate most declines.

- * 31% of workforce is in education, healthcare or social assistance.
- * 22% work in retail, hotel, arts and related, hotel or food.

In 2001, Lexington had a higher rate of population and employment growth than the U.S. and Kentucky. Lexington's population growth rate was nearly twice that of Kentucky's, and its employment growth rate more than four times greater than Kentucky's.

INDUSTRY BY NAICS CATEGORY	FAYETTE COUNTY EMPLOYEES IN 2000	FAYETTE COUNTY EMPLOYEES IN 2011	GROWTH (DECLINE) IN NUMBER OF EMPLOYEES	PERCENT INCREASE/ (DECREASE)
Civilian employed population 16 years and over	139,174	153,049	13,875	10.0
Agriculture, forestry, fishing, mining	2,913	2,533	(380)	(13.0)
Construction	7,537	5,865	(1,672)	(22.2)
Manufacturing	16,655	13,355	(3,300)	(19.8)
Wholesale trade	4,834	3,986	(848)	(17.5)
Retail Trade	16,501	16,246	(255)	(1.5)
Transportation, warehousing, utilities	4,806	5,300	494	10.3
Information	3,907	2,655	(1,252)	(32.0)
Finance, insurance, real estate, rental, leasing	7,927	10,173	2,246	28.3
Professional, scientific, management, administrative, waste management	12,609	16,357	3,748	29.7
Educational services, health care, social assistance	36,990	47,245	10,255	27.7
Arts, entertainment, recreation, accommodation, food services	13,643	17,203	3,560	26.1
Other services, except public administration	5,838	5,955	117	2.0
Public administration	5,014	6,176	1,162	23.2
Source: 2011 American Community Survey, U.S. Census NAICS				

2000 TO 2001 POPULATION AND EMPLOYMENT GROWTH	INCREASE IN POPULATION	RATE OF POPULATION GROWTH	INCREASE IN PEOPLE EMPLOYED	RATE OF EMPLOYMENT GROWTH
United States	30,170,013	10.72%	10,678,036	8.23%
Kentucky	327,587	8.11%	40,137	2.23%
Lexington	41,057	15.76%	13,875	9.97%
Source: U.S. Census				

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- ❖ Top two employers are public agencies
- ❖ Five of the top 14 are healthcare
- ❖ Two of top 14 are retail

TOTAL	8,133
# of Employees	# of Businesses
1-9	5,532
10-19	1,155
20-49	914
50-99	317
100-249	168
Source: Kentucky Small Business Development Center	

14 LARGEST EMPLOYERS IN LEXINGTON	DESCRIPTION	FULL TIME EMPLOYEES
University of Kentucky	Higher Education/Healthcare	14,000
Fayette County Public Schools	Local Education	5,374
Xerox	Outsourcing	3,000
Baptist Healthcare System Inc	Healthcare	3,000
Lexmark International Inc	Global Headquarters	2,800
Lexington-Fayette Urban County Gov't	Local Government	2,699
St. Joseph Hospital	Healthcare	2,500
Wal-Mart	Retail	2,027
Lockheed Martin	Contract Support Services	1,705
Kroger	Retail	1,665
Veterans Medical Center	Healthcare	1,500
Lexington Clinic	Healthcare	1,300
Amazon.com	Distribution	1,200
Trane Lexington	Manufacturing	1,000
Source: Commerce Lexington		

- ❖ Webasto Sunroofs, a manufacturer, is the largest small business, with 450 employees.
- ❖ Small businesses include home-based businesses as well as construction, personal care, retail, marketing, medical, and manufacturing.
- ❖ The Kentucky Small Business Development Center is headquartered at the University of Kentucky and provides consulting services to existing and start-up businesses.

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Jobs Infrastructure

Vacant Land

The 2010 Vacant Land inventory identified 1,491 acres of vacant jobs land, which is estimated to accommodate at least 11 years of growth. Of this land, 534 acres is in undeveloped green fields in the Expansion Area, which has been available for 17 years. Over 400 acres is in U.K.'s Coldstream Research Campus and has been available for much longer.

In the 1990's, the long-term supply of jobs land was being eroded as some of the best jobs land was given over to residential development, depleting the inventory for economic development by over 500 acres.

To ensure that the remaining jobs land is appropriated for job development, Lexington should develop new strategies and policies to address market demand for jobs land. Lexington should understand the needs of multiple types of clients who want to be located downtown, in suburban parks, or in proximity to supporting or similar producers. Small companies, particularly those whose business is technology, marketing, or industrial art may want to adapt a building or lot in downtown or a suburban shopping center into a funky, inspiring space. Some businesses may start out small but want the option to expand in place. Some will come to town with the need for a large building or complex. Lexington's regulations should be flexible enough to accommodate these types of demands.

The community now carefully guards its urban jobs land just as it does its rural farms. Local economic development leaders should work

together to discern the utility of the various vacant jobs parcels, which could lead to a comprehensive database of vacant jobs land.

An evaluation of vacant land should include an assessment of needed and available infrastructure. Lexington should consider a policy that would enable infrastructure improvements to be made early as a marketing tool or in quick response to the needs of a prospective client.

Redevelopment Opportunities

A discussion of available jobs land almost always starts with questions of what is vacant and what is available. Across Lexington and Fayette County, however, there are 5,579 acres already developed for jobs, some of which may not be fulfilling its true potential. These underperforming or underutilized lands may be victim of changing economic models, technology, or public taste, or failures of earlier planning efforts. They may be compromised by years of environmental constraint or degradation and in need of extensive remediation or cleanup. Sites such as former tobacco warehouses and fabrication yards present opportunities for redevelopment for contemporary jobs.

Perhaps the most notable example of repurposed jobs land is the ongoing conversion of Eastern State Hospital to a campus for the Bluegrass Community and Technical College. Education is a more fundamental component of any economic development strategy, so it is exciting that local and state leaders seized the opportunity to expand and showcase BCTC's role in Lexington's prosperity.

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Other opportunities to rethink existing job sites are scattered throughout the Urban Service Area and in the Rural Activity Centers. There should be a thorough review of potential redevelopment sites that includes and evaluation of constraints and opportunities as well as strategies for success.

Downtown Reimagination

The **Rupp Arena Arts and Entertainment District** encompasses 46 city-owned acres surrounding Lexington Center and Rupp Arena, plus surrounding blocks. The Rupp District proposal presents an opportunity to reinvent and revitalize Lexington's urban core through the construction of a new convention center and interior and exterior design improvements to Rupp Arena, which would become a stand-alone facility. The strategy for the Rupp District is based on four principles: The spirit and history of Rupp Arena and UK Basketball; enhancing Lexington's brand and culture; a renewal of downtown; and transforming the fan and visitor experience.

The **Town Branch Commons** is a 2.5 mile park system along the path of the Town Branch, Lexington's original waterway that is now buried in a culvert. The plan identifies and opens up new development opportunities along the length of the project, which extends from Manchester and Cox Streets near Rupp Arena, along Vine and Water Streets to the vicinity of Midland Avenue and Winchester Road.

Both of these projects are in the planning stages.

What price, Land?

Among the biggest debates among economic development leaders about vacant jobs land in Lexington is the perception that land costs are too high and are a deterrent to economic development. The

veracity of this perception should be evaluated along with any subsets of the cost of land development, including infrastructure improvements and Expansion Area exaction fees.

To date, none of the 500 acres of Expansion Area Economic Development land have been developed, even considering the addition of permitted uses to the zoning text adopted in 2007. Like land cost, there is a perception that exaction fees, which range from \$40,000 to \$81,000 an acre, adversely affect the desirability of jobs land. There has been no study to determine the impact the exaction fees have on the marketability of the Expansion Area ED land. The Urban County Council adopts the Exaction Rate Table, which was last updated in March 2010.

There may be any number of ways to affect the cost of jobs land in Lexington. The first step, however, is to determine whether the land costs are indeed a factor in job makers' decisions to locate or expand here.

Public-Private Partnerships

The challenges related to upkeep and construction of public infrastructure should lead Lexington to explore developing a network of public-partnerships. These partnerships can provide more cost effective and timely infrastructure improvements, as well as offer significantly better ongoing maintenance all while maintaining an appropriate level of public control over projects and facilities.

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Can these Jobs Centers support more jobs?

Coldstream Research Campus

- * Interstate and arterial access
- * Owned and managed by University of Kentucky
- * 400 acres of vacant land
- * 2009 Master Plan recommended a new layout and uses
- ~ Implement the 2009 Master Plan

Avon Rural Activity Center

- * Vacant and potentially underutilized industrial land on a rail line
- * Owned by the Commonwealth of Kentucky
- ~ Evaluate for partnerships and future uses

Blue Sky Rural Activity Center

- * High-profile, accessible industrial site, may be underutilized
- * Upcoming sanitary sewer infrastructure improvements
- ~ Determine if maximizing potential

Turfland Mall/Springs Motel

- * Dead mall and vacant lot
- * Thriving outlots and mall anchors
- * Previously considered for TIF redevelopment
- * Accessible, adjacent to residential
- ~ Partner with owners to create a new plan that includes good jobs

Northeast New Circle Road and Winchester Road

- * Good roads, good traffic counts
- * Vacant lots (Continental Inn); adult businesses
- * Adjacent to residential; poor pedestrian access
- * Discussed in East End and Central Sector SAPs
- ~ Work with owners, seek public/private partnerships to create developments with job opportunities

Flexibility for Jobs Land

How Lexington uses its jobs land may require some of the same types of flexibility that the 2013 Comprehensive Plan recommends for residential land. Manufacturing firms may prefer to transition to software development and market research activities on their sites. Knowledge-based companies may demand a mix of uses in their vicinity, but may still need the space that an office or industrial park enables. Formerly large firms whose business models have changed may have surplus land and buildings that could be recast for other job or neighborhood uses, but in a way that is compatible with the existing good will the firm has accrued. To accomplish these kinds of alternatives may require a reconsideration of long-held principles of the zoning map and text, much like Infill and Redevelopment has accomplished with new options for housing and neighborhood commercial development.

Live where you Work

Adaptive reuse, infill, and redevelopment are not only about preserving farms and important buildings and making better use of existing infrastructure. They are also about putting jobs where people live. Many of Lexington's businesses - large and small - can thrive as *neighbors* in and near neighborhoods. Land use regulations should enable opportunities to live where you work. Infrastructure improvements, including broadband technology, bicycle, pedestrian and malleable transit will be partners in efforts to create jobs where people live.

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Talent

Attracting talent is one of the most difficult aspects in attracting entrepreneurs as well as growing our existing businesses. While Lexington is widely considered to be a great place to live, many young professionals entering the workforce after college are looking for amenities and features that may not be present in Lexington. Today's rapidly changing and evolving technologies need to be addressed in our public infrastructure, as well as its role in attracting a modern workforce.

Public open spaces

We should evaluate all of our downtown open spaces for the opportunity to create wireless internet hotspots, charging stations for devices, and outdoor classrooms and meeting spaces that can serve as places to collaborate and work. Neighborhood library stands that provide *take a book, leave a book* services in public parks add to a community's cultural amenities. Creating a culture of creativity and collaboration in Lexington will attract workers that are greatly desired by new and existing businesses.

Providing Varied Entertainment Options

Equally important in attracting workers as well as retaining them, is having wide and varied entertainment options. While Lexington does offer and ever growing number of small venues for live music and performing arts, Lexington does not have adequate facilities to attract the magnitude and quantity of traveling plays and operas beyond what the Lexington Opera House can accommodate. The 940-seat Lexington Opera House is eclipsed regionally by the 2,377-seat

Whitney Hall and 1,400-seat Brown Theater in Louisville as well as the 2,100-seat ECU Center for the Art. The University of Kentucky's Singletary Center Concert Hall accommodates 1,467 people, but is not designed for large and complex theatrical productions. Lexington should strive for facilities that will attract larger arts productions and musical acts that will likewise signify to prospective employees that Lexington will provide them with a multitude of arts and entertainment activities.

Internet

"American economic history teaches a clear lesson about infrastructure. If we build it, innovation will come. The U.S. needs a critical mass of gigabit communications nationwide so that innovators can develop next-generation applications and services that will drive economic growth and global competitiveness."

-FCC Chairman Julius Genachowski, January 2013

From communication to marketing, the internet is critical infrastructure for a successful economy. Personal and professional technology seem ubiquitous, but broadband technology and the attendant devices are not universal and are not necessarily free, creating a digital divide - the separation of people from economic and government activity because of the factors of cost, device, relevance, and training in computer use. Fortunately for some of our citizens, this divide is being bridged.

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All branches of the Lexington Public Library have computers and Internet access free to their patrons. The Library, Urban League, and other public service agencies operate computer training programs. Lexmark has donated computers and printers for training programs. Federal, state, and foundation grants have funded Wi-Fi expansion into downtown, the East End and Cardinal Valley.

For people with their own internet-capable devices, Wi-Fi is available at various commercial locations, from fast food restaurants and coffee shops to hotels and Blue Grass Airport.

Public and private resources should continue to be directed toward ensuring that Lexington's technological infrastructure meets the demands of its citizens, particularly those with economic disadvantages.

As a means of lowering barriers to entry for new businesses, there may be an opportunity for public infrastructure investment in commercial fiber optic high speed internet as an economic development tool. In the 1980's, the city of Chanute, Kansas began to develop a fiber optic network to help manage the power grid of their publicly owned electric utility. Shortly thereafter, their largest electricity consumer connected to the network as a means for them and the City to manage their power needs more efficiently.

In the 1990's, Chanute expanded its network to support other government services and educational facilities as well as for economic development purposes. By 2005, local businesses were interested in

connecting to Chanute's network because of its reliability and faster available speeds. Further expansion has improved communications for public safety officials as well as their regional medical center.

In Chattanooga, a local utility deployed a fiber network to 170,000 homes. Thanks to the city's investment in broadband infrastructure, companies like Volkswagen and Amazon have created more than 3,700 new jobs over the past three years in Chattanooga.

-FCC, January 2013

Lexington should explore opportunities to create a fiber optic network to link the City, University of Kentucky, Fayette County Public Schools as well as local businesses that have greater data and bandwidth needs than what the private sector currently provides. Providing greater data infrastructure has the power to be a great economic development tool and set Lexington apart from other communities.

Transportation

Job opportunities include the infrastructure to enable and manage transportation facilities that meet a full range of needs. With up to a third of residents that do not drive due to age, financial resources, disability, or personal preference, Lexington must ensure that it provides alternatives to driving in order to meet the transportation needs of its citizens. This includes a comprehensive and accessible public transit system and bicycle and pedestrian options that can get people to jobs and training. Walkable and bicycle-friendly communities

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are routinely recognized and marketed as communities with a high quality of life that attract and retain businesses, professionals, and tourists.

The economic success of a region depends on its connections to the region, state, and beyond and its ability to facilitate the movement of people and goods across and within its boundaries. Increased competition in today's global economy rewards those regions that have planned for and pursued seamless transportation systems, which depend on efficient connections between all modes of travel. Transportation facilities and service levels are important elements that businesses consider when locating to a new area because of the cost savings and increased economic competitiveness these regions provide.

Trucks

At some point in freight shipment, almost all goods are moved by truck. The trucking industry, therefore, is a vital component of the goods movement system. The typical freight *trip* usually involves three to six moves within the freight system - most of the movements made by trucks.

Truck traffic in Lexington tends to follow the major roadways. They use local streets only when approaching a destination away from the major road network.

In Lexington, through truck trips without a local destination are required by Ordinance to use New Circle Road or Interstates 64 or 75. New Circle Road is the only designated truck route in the urban area as it provides access to or is near all industrial areas.

State motor vehicle regulations set maximum limits on weight, height, width, and length of vehicles that operate on the many state roads in Lexington. There are no local ordinances controlling vehicle weights on non-state highways.

The Urban County Government controls truck and through-truck movement in many locations with signage and police enforcement. Most signs have been placed in response to complaints from local residents in neighborhoods where it has been determined that truck traffic conflicts with residential areas and is inappropriate.

Rail

Rail service in Lexington, for the most part, is freight-only and provided by three common carriers. The most active carrier is Norfolk Southern Corporation, which maintains a line bisecting Kentucky running from Chattanooga to Cincinnati. NSC runs 35 to 40 trains a day carrying a wide range of commodities including forest products, chemicals (plastic and asphalt), cars, peanuts, liquor, and steel, and is a primary delivery component for the Georgetown Toyota plant. CSX Transportation owns a majority of the remaining rail lines in Lexington and has contracted the local switching operations from the yard facility in Winchester to the R.J. Corman Railroad Company. Corman has also leased the nearly 100 miles of track from Winchester to Anchorage, Kentucky and operates it in conjunction with its Central Kentucky Lines track to Versailles. Materials carried by Corman include peanuts, aluminum ingots, alcohol, paper, plastic, fertilizer, limestone, sand, scrap paper, brick, corn syrup, and oil.

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Blue Grass Airport

Lexington's prosperity is linked to its national and international transportation options, particularly the function of its airport. Commercial business and leisure travelers have nonstop access to a dozen international airports, including New York and Washington, D.C.

Air cargo at Blue Grass Airport is handled by commercial airlines and independent cargo carriers, and consists of air freight, air express and the U.S. mail. Air express and the mail are currently handled through a 14,000 square foot cargo building. Additional air express/freight is handled through separate facilities. There are 22,800 square feet of cargo space in four buildings.

Blue Grass Airport is finalizing a [master plan](#) that will guide its role in serving customers and supporting the air transportation system. Based on Lexington's demographics, economic conditions, and historic growth, the airport will serve up to 628,000 departing passengers by 2032 and 57,000 general aviation operations. In 2012, there were 547,115 passenger departures.

Based on aviation demand and existing facility conditions, the master plan's preliminary recommendations call for:

- ❖ expanding hangar and general aviation facilities
- ❖ increasing parking capacity
- ❖ improving and consolidating rental car service facilities
- ❖ implementing a taxiway safety enhancement program

Selected Employment Sectors

Manufacturing

According to the University of Kentucky's [Center for Business and Economic Research](#), Central Kentucky manufacturing was hit hard during the recent recession, but did begin to rebound in 2010.

Kentucky experienced stronger manufacturing employment growth in 2011 and 2012 than the U.S. average. The losses in the Lexington area, however, have been slower to recover and manufacturing employment has been flat since 2011. Economic forecasts do not envision a return to pre-2007 levels. These types of shifts in our employment has been flat since 2011. Economic forecasts do not envision a return to pre-2007 levels. These types of shifts in our employment sectors should encourage us to focus on promoting innovation industries and education as a means of improving our economic outlook. According to the U.S. Department of Commerce Economic Development Administration's [Innovation Index](#), Lexington has the highest ranking in Kentucky, which still lags the national average. Promoting high-tech employment is a major variable to improving our national standing.

Health Care

In the past few years, Lexington has seen strong growth in both the public and private medical industry. Private sector growth has come primarily in the form of facilities for Alzheimer's and dementia care as well as nursing homes. Growth in this area should continue to be strong as a larger percentage of our population continues to age. In the public realm, the University of Kentucky Medical Center has undergone significant growth. Since 2004, the hospital has invested

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\$1.4 billion in improvements in pursuit of being a Top 20 public academic health center. As a result of those infrastructure investments, the hospital has seen growth in excess of 80 percent during that same time period, according to [UK's HealthCare 2012 annual report](#). Promoting our existing health care businesses as well as potential supporting industries in this field will be vital to job and wage growth in the coming years.

Green Infrastructure

Tourism

In 2009, tourism in Fayette County generated \$1.66 billion in direct and indirect economic benefits, including convention and non-convention travelers. The industry supported 23,420 jobs with a \$540 million payroll. As the Horse Capital of the World, Fayette County's horses and unique rural landscape ranked highest by tourists participating in a 2001 [survey](#) commissioned by the Lexington Convention and Visitors Bureau (LCVB), with the top two tourist destinations the Kentucky Horse Park and Keeneland.

According to the 2011 LCVB survey, horses, landscapes, and then bourbon were the reasons for visiting the area. Bourbon distilling was once strong in Lexington, a tradition that blends well with agricultural and cultural tourism. Lexington is not on the popular bourbon, winery, and brewery trails throughout the region.

The trend in tourism is to offer opportunities for tourists to have a total experience. Lexington is well-situated to capitalize on opportunities for

ecotourism, agritourism, and cultural tourism which are the fastest growing segments of the tourism marketplace.

Another strong potential tourism is the greenway trail system, composed of shared use, equestrian, and water trails throughout Fayette County and beyond. In 2010, LFUCG build the eight-mile Legacy Trail between the Kentucky Horse Park and the YMCA on Loudon Avenue. With a public art component, it was designed as a signature trail that is intended to become a tourist destination for bicycling. There are efforts in neighboring Scott County to extend the trail into Georgetown. It is important to finish the Legacy Trail and build the other trails described in the [Greenway Master Plan](#) as part of a strategy to attract tourists.

Tourism in Fayette County is significant and can become an even stronger component of economic development. Collaboration between LFUCG, the Kentucky Horse Park, the Kentucky Tourism, Arts, and Heritage Cabinet, the LCVB, Downtown Lexington Corporation, Commerce Lexington, and interested groups and businesses could bolster various efforts. To attract, recruit and package multi-day events and attractions require all stakeholders working together.

Food

The food system includes production, processing, distribution, consumption, and disposal. Today the process is controlled by a highly centralized industrial food complex. In this conventional system, it is not easy for large chain grocers and institutions to source food from small-scale growers and producers that are characteristic of the

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Bluegrass Region. With its protected and superior soils and Interstate access, Fayette County is well-positioned to support robust food production and distribution. Yet statewide, Kentucky imports 95 percent of its food

There are no easy solutions to bolstering community-based foods due to size and complexity of the food system. What to produce and where to sell are demand driven; labor and land prices are locally determined; and prices for local foods will be higher until an economy of scale for widespread distribution is achieved. A community should measure the true cost of food arising from the relationship between conventional food systems and the environment.

Lexington is among the cities that recognize that the security and prosperity of their communities rely on their food systems are functioning in a more sustainable manner. Food systems are regional in scale, and coordination is key to expanding production, processing, and markets for farmers on one end, and access to fresh healthy foods into neighborhoods, schools and the workplace at the consumer end of the spectrum. Louisville commissioned a study in 2007 to conduct a comprehensive assessment of their thirteen-county food system and discovered that the City is a \$3 billion food market. The study made recommendations on how to increase Kentucky farmers' share of the market and bridge the gap between local suppliers and consumers. A staff member in the Louisville Mayor's Department of Economic Growth and Innovation implements the study.

LFUCG is seeking funds to hire a local foods coordinator for one year. The goal is to increase access to and the availability of locally grown

food. An advisory committee will oversee the position and provide accountability

A study of the the food system may suggest strategies such as:

- ❖ Setting aside land at the neighborhood level for groceries, farmers markets, and community gardens
- ❖ Ensuring new groceries are on transit routes
- ❖ Promoting incentives for small store owners to carry healthier foods
- ❖ Creating incentives for chain stores to locate in low-income neighborhoods
- ❖ Forming new partnerships and engaging the public
- ❖ Calculating the loss of prime soils in USA boundary expansion discussions
- ❖ Allowing flexible zoning for creative solutions and new technologies
- ❖ Considering the impact to the food system in zoning and policy decisions, providing choice and access for health foods for all citizens
- ❖ Maintaining a website for healthy foods locations
- ❖ Educating students and citizens about the food we eat; providing resources about access to affordable, quality food and nutrition for parents and caregivers

Green Construction Projects

In the coming years, numerous new green infrastructure projects will be constructed throughout Lexington as part of best management and cost-effective development practices. Architectural design and construction has begun to incorporate more sustainable practices. For instance, upcoming projects that are associated with the [EPA Consent Decree](#) will require an economic infrastructure that is responsive to the

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particular needs of the emerging field of green construction workers and businesses will be needed that supply, build, maintain, and monitor green building projects.

Agribusiness

Any credible economic development plan for Fayette County must feature agriculture and its cluster of related businesses and services as a principal component of prosperity. Over 112,000 acres of land has been designated as Core Agricultural and Rural Land. Fayette County's farm land is assessed at nearly \$900 million - the highest in Kentucky and nearly doubles second-place Woodford County. The agriculture cluster accounts directly or indirectly for one out of every nine jobs in Lexington. Agribusiness, therefore is a sector of Lexington's economy that must be understood and appropriated.

Based on a January 2013 report, *The Influence of the Agricultural Cluster on the Fayette County Economy*, agriculture has been markedly undervalued due to the exclusion of the hundreds of businesses that exclusively serve agriculture. There are many businesses, such as finance, veterinary, recreation, transportation, communications, and retail and wholesale trades (including food processing and manufacturing) that are associated with agriculture.

The study quantifies the importance of Fayette County's brand on the local economy. Key conclusions of the study include:

- ❖ Fayette County's unique agricultural status allows it to import tremendous wealth from outside the region that is then invested and spent within Fayette County in a wide range of industries

- ❖ The combination of historical, cultural and visual amenities that accompany this investment gives Fayette County a distinctive brand that generates a cycle of business activity
- ❖ Fayette County's character has a positive influence on workforce recruitment and retention
- ❖ Fayette County and local businesses have invested in a vibrant and entrepreneurial local food and entertainment industry

Horses

The equine industry dominates agricultural sales and is the primary tourist attraction. Analysis from *The Influence of the Agricultural Cluster on the Fayette County Economy* concludes that "Fayette County's distinctive brand is a major component of an growth strategy. The area's nationally-recognized character is a catalyst offering businesses a framework on which to build their own image."

Training Opportunity for Ag-Related Careers

Fayette County Public Schools has built a green technical high school to introduce and train students in the science and management of agriculture. Locust Trace is located on an 82-acre site in the rural area near the Federal prison. Students study in one of five programs: Intro to Agriculture, Veterinary Science, Agriculture Power Mechanics, Equine, and Small and Large Animal Science. The school features spacious classrooms with labs, 6.5 acres for gardening, a state-of-the-art greenhouse with aquaculture tanks, an auditorium constructed to bring in large machinery and livestock, an equine barn and arena, and an on-site veterinary clinic.

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Rural Tourism

The premise for rural tourism is to offer an activity, event, product, or experience that attracts visitors and has a direct tie to the land. Rural tourism adds value to traditional rural income and helps preserve the agricultural industry and culture. Opportunities for agri/eco/cultural tourism are broad. They can range from low-impact nature walks, to horse farm tours, to seasonal harvest events. Successful ventures often have educational activities, with some tying into the public school curriculum for hands-on teaching opportunities.

The specific definition and permitted activities are locally driven, so they vary significantly between communities. Fayette County should tailor its definition and regulations to meet the objective of rural tourism without negatively affecting natural resources, landscapes, and farm operations. A community-wide task force through the Vice-Mayor's office began meeting in 2012 to consider tourism and recreational uses. Their tasks included developing definitions and recommending land uses for enterprises that complement working and sensitive rural land.

Recommendations for new policies and strategies

- ❖ Focus on growing economic sectors, such as science and technology, agriculture, and tourism.
- ❖ Analyze the cost of land as a factor in economic development, including supply, infrastructure, and Expansion Area Exactions.
- ❖ Identify and analyze the potential of underutilized jobs land.
- ❖ Continue to evaluate and modify the zoning map and text to enable job development opportunities.
- ❖ Enable entertainment and experiential opportunities that attract and retain a talented workforce.
- ❖ Monitor and analyze the impact of the increase in suburban poverty.
- ❖ Explore opportunities to expand a fiber optic network to offer greater bandwidth for public safety, research, and businesses.
- ❖ Expand quality internet and computer access to underserved households.
- ❖ Seek partnerships that lead to improved jobs infrastructure.
- ❖ Support efforts at the State level to promote and protect the equine industry.
- ❖ Conduct a comprehensive assessment of the existing food system to set goals and develop strategies.
- ❖ Explicitly permit community gardens in the zoning text.

Chapter 6

IMPROVING A DESIRABLE COMMUNITY

What is a desirable community?

**What draws people to stake their future in
Lexington?**



IMPROVING A DESIRABLE COMMUNITY

A desirable community is a place where tourists want to visit, new companies want to relocate, and residents want to live for a long time. Lexington is known as a desirable place to live. From its excellent health care and higher educational opportunities to its strong neighborhoods and beautiful landscapes, Lexington is a showcase of opportunity for a desirable community.

A [Knight Foundation survey](#) published in 2011 found that three main qualities attach people to place:

- ❖ **Social offerings** (entertainment venues and places to meet)
- ❖ **Openness** (how welcoming a place is)
- ❖ **Aesthetics** (its physical beauty and green spaces)

As a desirable place to live, Lexington possesses these qualities because of our strong urban form, thriving neighborhoods, and vibrant commerce. As the survey discovered, not all of the the qualities that make a community desirable are tangible. To keep the desirable assets and improve the areas where change is needed takes a broad understanding of the interrelated systems and shared values that affect place making.

While every community needs good transportation, health networks, and jobs, a desirable community goes beyond utilitarian infrastructure and services. The basis for place making at a community scale begins with a sustainable urban form.

Place making

Place making as a means to desirable community begins with a vision that is achieved through public consensus. Lexington is fortunate that

its residents recognize that their community has a strong sense of place and cultural presence. They share in their values to keep its unique identity, historic building, neighborhoods, and landscapes.

There are many assets in Lexington from which to build upon the shared vision. The three qualities - social offerings, openness, and aesthetics - can be found here. Private revitalization of city blocks become venues from entertainment and places to meet. Downtown has successfully become more attractive after streetscape improvements.

To be more desirable, Lexington must shape and design its public spaces (and facilities for semi-public and private spaces) with an eye towards delivering the intangible qualities that people seek. Place making at a community scale begins with a sustainable urban form. Social offerings, openness and aesthetics along with civic and social capital, public health, cultural expression, environmental health, and economic vitality are all influenced by a city's organizational structure.

Therefore, planning the urban form should provide more than the rudimentary functions of moving people and goods, or deciding where buildings are located. Examples of the importance of urban form in shaping a desirable community, and how land use planning and design can enable place making include:

- ❖ **Walkability** - dependent upon not just the presence of a sidewalk, but also features that invite and encourage walking, such as block length, directness, setbacks, and attractive streetscape design.
- ❖ **Destinations** - accessible by trails, bike lanes, and transit where appropriate and for people with disabilities.

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- ❖ Place making - encourages locating transit stops for convenience and designing them to be welcoming places.
- ❖ Sustainable agriculture and cultural landscape
- ❖ Context sensitive - street cross-sections that respond to land use; parks that respond to population they serve; and natural resources that are sufficiently buffered for their protection.
- ❖ Public spaces - streets, parks, schools, plazas and buildings should be located and designed to be inspiring, safe, inviting, and attractive.

Transportation

How does Transportation contribute to a Desirable Community?

- ❖ Provide safe roads for pedestrians and all users
- ❖ Reduce traffic congestion and travel time
- ❖ provide accessible and viable alternatives to car travel

What does the 2013 Comprehensive Plan recommend?

- ❖ Include innovative strategies, such as Double Crossover Diamond intersections and roundabouts in ROW design
- ❖ Expand transit
- ❖ Retrofit existing road network for bicyclists

Providing people with safe, efficient, multimodal transportation is vital to Lexington's livability. This requires coordinated land use and transportation planning, particularly with respect to encouraging travel by means other than personal automobile. Walking, bicycling, and

public transit are low-cost, efficient, and healthy ways of moving about the community and play a key role in a desirable and sustainable city.

A person's decision to bicycle, walk, or ride the bus is influenced by many factors. The availability of sidewalks, bicycleways and transit amenities are one consideration; however, community design also significantly impacts people's choices. Pedestrians and bicyclists are sensitive to the surrounding environment. They generally dislike too-long trip distances and desire streets and walkways that connect them to nearby destinations as directly as possible. Pedestrians also enjoy streetscapes that provide visual interest, shade trees, and adequate separation from traffic. These qualities can be achieved through complete streets design practices.

Community design, including land use patterns, building orientation and architecture strongly influence how people choose to travel. Sound planning guidance encourages communities to examine characteristics such as density, diversity of uses, design, distance to transit, destinations, development scale, demographics, and demand management (or the 8Ds) to determine their effect on travel demand. Walkable development practices encourage a mix of land uses, a variety of housing types, and higher densities that make communities more compact and walkable. Neighborhood-oriented retail and commercial centers allow store and services to be located near where people live. Schools and park nearby that are accessible by foot also encourage neighborhood children to bicycle and walk to them. Greenspace, natural areas, public art, pedestrian-oriented store fronts, tree-lined streets, and active civic spaces encourage and enhance the walking experience.

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The MPO's [Regional Bicycle and Pedestrian Master Plan](#) addresses strategies for multimodal transportation. It includes a community-wide inventory of bicycle and pedestrian facilities and identifies gaps in the complete streets network. Currently, 33 percent of arterial streets do not have sidewalks (compared to 38 percent in 2007) and 11 percent have sidewalks on only one side of the streets (compared to 15 percent in 2007). The plan notes that retrofitting these arterials with sidewalks during new development and redevelopment is critical to completing the arterial sidewalk system and improving pedestrian safety. Lexington has 28.8 miles of bicycle lanes (up from 12 miles in 2007) and 22.9 miles of shared use trails (up from 8 miles in 2007). The Bicycle and Pedestrian Master Plan prioritizes the improvements that are needed along collector and arterial streets to safely and more comfortably accommodate bicycle and pedestrian travel.

Greenway trails that are well integrated with on-street bicycle and pedestrian facilities contribute to a balanced, convenient and desirable non-motorized transportation system. Trail facilities provide connections not offered by the roadway system and can reduce trip length. Trail facilities connect key destinations and offer bicycling and walking opportunities in natural and scenic environments. The [Greenway Master Plan](#) provides the framework for trail development in Fayette County.

With respect to new streets, the comprehensive plan shows the general location of new collector streets that will connect with the arterial system. The major roadway network in Lexington's Urban Service Area is essentially set, although there are a number of proposed roads across undeveloped parcels or planned as part of redevelopment.

Constructing these unfinished segments will complete the arterial and collector road network in the Urban Service Area. This does not, however, mean that opportunities for system improvement have been foreclosed. For example, in 2011, an award-winning, first-of-its-kind

Image 6.1 Double Crossover Diamond



Image from www.transportation.ky.gov

safety and operational plan was implemented at New Circle and Harrodsburg Roads with the construction of the [double crossover diamond](#) interchange. A new reverse-lane scheme was introduced at Man o War and Nicholasville Road to improve operations. There is ongoing evaluation of the cost and benefits of returning Lexington's downtown streets to two-way traffic. Within the constraints of a set roadway network, there exists numerous opportunities for improvement - improvements that support a desirable community.

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Traffic congestion is an ever present concern for residents and visitors. Growing population and increased travel demand on the transportation system can begin to maximize roadway capacity for vehicular travel. The Federal Highway Administration defines congestion as the level at which transportation system performance is no longer acceptable due to decreased speeds and increased travel times. The FHWA defines bottlenecks as a point or location where traffic demand exceeds the normal capacity. Impressions of congestion vary by location and land use. At any given time, a driver has different expectation for congestion on Lexington's Main Street versus Nicholasville Road versus New Circle Road.

To address congestion and bottlenecks, the [Moving Ahead for Progress in the 21st Century Act \(MAP-21\)](#) of 2012, the Federal transportation authorization bill, requires that a Congestion Management Process (CMP) be part of the metropolitan planning process. There are three categories of strategies that are considered within the CMP: Transportation Demand Management (TDM) strategies, Traffic Operational Management (TOM) strategies, and Transportation Improvement Program (TIP) strategies.

Transportation demand management, traffic demand management or travel demand management (all TDM) is the application of strategies and policies to reduce travel demand (specifically that of single occupancy vehicles), or to redistribute this demand in space or in time. Examples of TDM include community growth management, improved transit services, and rideshare programs.

Examples of TOM strategies are roadway access management, improved traffic signs/signals and intersection improvements. Examples of TIP strategies are additional traffic lanes, interchange redesign improvements, and variable lane use.

All these strategies recognize that widening roadways to add more vehicular capacity is not always the best or most effective solution. With limited funding available, the emphasis is on preserving, maintaining, and getting the most out of the transportation system we have. Innovations for roadway system improvement and fresh thinking about planning, management, and financing strategies that help decision-makers select innovative roadway strategies are routinely considered. Recent innovative roadway system improvements in Lexington include the double crossover diamond interchanges, roundabouts, variable lane uses, and adaptive traffic signal controls.

One major strategy to address congestion includes the provision and expansion of public transit. The Lexington Area MPO has developed a [Long Range Transit Plan](#), which will be updated in the near future. LexTran is the primary public transit provider. Ridership has continued to increase since 2004 when Lexington Citizens voted for a dedicated transit property tax. This provides reliable and continuing financial support so that LexTran can more proactively meet future demand. Experiencing yearly ridership growth, LexTran has experimented with different routing ideas, infrastructure, and amenity improvements to build ridership and to become a more attractive commuter choice. As with highway operation, LexTran is studying innovative methods, such as bus rapid transit systems and the possibility of designating and improving Nicholasville Road and South

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Limestone (U.S. 27) as a high capacity transit corridor to address congestion and enhance transit service.

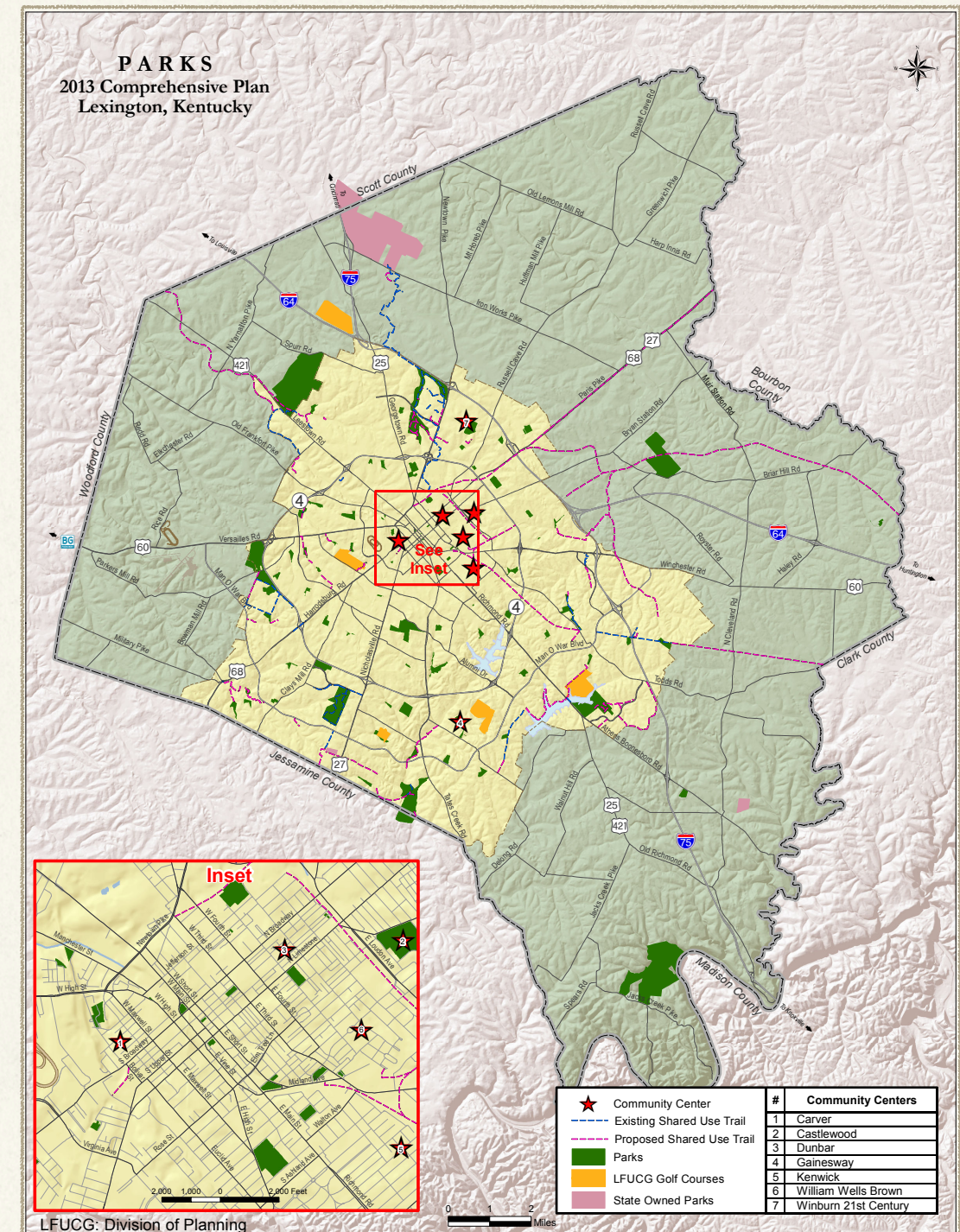
Recommendations for new policies and strategies

- ❖ Design a complete streets policy that can be implemented in Lexington
- ❖ Implement the 2007 Bicycle and Pedestrian Master Plan
- ❖ Devise a metric to calculate how traffic congestion will be reduced by new development or redevelopment along arterial and collector roads
- ❖ Use new and innovative techniques in operations and transit to address traffic congestion and travel demand, including but not limited to bus rapid transit options and high capacity transit corridors

Green Infrastructure and a Desirable Community

The Inner Bluegrass region is noted for its beauty and exceptional agricultural productivity. Green infrastructure continues to be key to Lexington's desirability. Our landscapes have expressed aesthetic, natural, historic, and cultural qualities highly valued for their social, economic and ecological benefits.

Map 6.1 Parks



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How does Green Infrastructure contribute to a Desirable Community?

- ❖ Defines urban form
- ❖ Shapes and protects the natural, historic and cultural heritage
- ❖ Provides community identity and character
- ❖ Connects neighborhoods
- ❖ Provides recreational and leisure opportunities
- ❖ Reinforces values and environmental stewardship

- ❖ Consider the role of Green Infrastructure in all planning decisions
- ❖ Continue building greenway trails
- ❖ Protect existing green streets and construct new ones
- ❖ Find partners, such as schools, businesses, and nonprofit organizations to help with green programs
- ❖ Encourage walking and biking to schools
- ❖ Protect the rural landscape identity

For more information about Green Infrastructure, please see Chapter 4.

Urban Parks

While Lexington's rural landscape is expansive and intact, the urban landscape consists of small separate greenspaces. Public parks constitute the largest average of urban greenpace.

The [Division of Parks and Recreation](#) is responsible for a wide range of services, from conservation to community centers. Since the 1970s,

staff has concentrated on providing facilities for playing ball, swimming, and other programmed activities. In a local survey from 2008, respondents expressed an interest in a wide range of recreation facilities, such as a BMX trail, climbing walls, lacrosse fields, archery, multipurpose gyms, additional skateboard and dog parks, public access for boating, fishing, more non-programmed greenspace, and senior centers. Respondents' primary concern was maintenance. The number one wish was for more trails throughout Fayette County, including equestrian, mountain biking, park walking trails, and greenways. They also expressed a desire for bike lanes that connect within and between parks.

Parks are not static; they need to evolve continually in order to meet shifting trends, which are moving towards more individual or self-led activities. The Division of P&R wants to accommodate new trends while recognizing that the demands for ballfields and current programs must still be met.

As the remaining vacant land and infill opportunities are developed in Lexington, addressing park deficiencies and underserved areas while continuing to keep pace with new demands should be a priority. As with other public services, more partnerships and sponsorships are going to have an increasing role in funding and managing parks. The [2009 Parks and Recreation Master Plan](#) recommends that the Division of P&R create and identify opportunities for joint use facilities and for more flexibility to use parks spaces in multiple ways. The Division of P&R has a strong foundation to build upon its current partnerships with sports leagues and sponsors. In addition, there are four different Friends groups and a Park Advisory Board. The Division of P&R has

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an informal agreement about facility usage with Fayette County Public Schools when schools and parks are adjacent to each other.

Fayette County Public Schools provides a supplement to the parks system by allowing the community to use its lawns and playgrounds when students are not using them. many public school playgrounds are very active after school hours and on weekends.

The 2009 Comprehensive Parks and Recreation Master Plan Update lists park development priorities. Land use recommendations include:

- ❖ Change from formerly ascribed standards of programming and location to customized parks based on the needs of the population a park serves
- ❖ Locate a sports field complex on the east side of Lexington
- ❖ Reclaim public greenspace in parks
- ❖ Locate and build the Downtown trail hub that will be the center for the primary east-west and north-south trails
- ❖ Link parks with greenway trails, especially in neighborhoods where car ownership is low and access to parks needs improving

For more information about open space and park planning, please see Chapter 3.

Other Recreation

Some of the large acreages for non-LFUCG recreational facilities include:

- ❖ Private and semi-public golf courses (1,269 acres)

- ❖ Race tracks (888 acres)
- ❖ Reservoir - fishing (428 acres)
- ❖ Fayette County Public Schools athletic fields (127 acres)
- ❖ UK and Transylvania athletic fields (89 acres)
- ❖ Private clubs (874 acres)

Trail Greenways

The adopted 2002 Greenway Master Plan proposed a system of trails to connect neighborhoods and the community to the region. Off-road trails are planned in stream, rail and utility corridors; on-road facilities link trails together. Implementation of the Greenway Master Plan accelerated after \$3 million in local bonds were allocated in 2008 and 2010 for greenway and park trails. Between 2007 and 2012, \$12.7 million were spent on greenway trail studies, design, or construction. There are now 24.5 miles of greenway trail with 28.8 miles of on-road trail connections. Addition trail projects are in various stages of development.

The popularity of the eight-mile **Legacy Trail** indicates that the public supports greenway trails. Of the 84 miles of remaining greenway trails proposed in the 2002 Greenway Master Plan, many may be difficult to build or not feasible at all, due mostly to geographic constraints or land ownership. Any reassessment of the current proposed alignments should recognize the benefits of a comprehensive network coupled with demand for trails from the public. Guidelines for streetscape design of on-road connections should be created to indicate their significance in the trail network and enhance the trail user experience. This may include sidewalk widths, lighting, wayfinding, benches, landscaping, street trees, traffic calming, bicycle lanes, or bike boulevards.

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Urban Streets

The [Greenspace Plan](#) recognized that the Bluegrass image extends to the visual experience of traveling city streets, which is why it recommended studies and guidelines for streetscape design. Tree-lined streets and planted medians are important urban greenspaces that contribute immensely to the visual character of an urban corridor. In particular, arterial streets designed as boulevards convey the message that the street is welcoming and an important civic space. Major corridors should project an image that is inviting and vibrant. This image should enhance the corridor's character and its role in creating a sense of place. Green planting strips and other roadside open spaces provide buffers to pedestrians and residential properties and gateways into neighborhoods. **For more information about trees and inviting streetscapes, please see Chapter 3.**

In the [Expansion Area](#)(PDF file), Scenic Resource and Special Design Areas are intended to minimize the visual impact of a development on an adjoining rural road. In both of these areas, clustered development and 200-foot setbacks from the rural road are required.

Complete Streets is a comprehensive approach to street design, including placemaking treatments such as:

- ❖ Boulevards that include medians, street trees, wide sidewalks, and bike lanes
- ❖ Street widths based on context of adjacent land use, which allows narrower street pavements where appropriate
- ❖ Options for eyebrows (a small loop street with a grassed island)
- ❖ Wider planting zones for taller trees
- ❖ Vegetated traffic circle at intersections of local streets

- ❖ Single-loaded streets at the urban service boundary, where houses are constructed on only one side

The portion of Richmond Road with median, mature trees, front-facing houses, and cohesive setbacks is a gradual transition to downtown and an exemplary example of boulevard design. There are other fine examples of green streets in Lexington that have medians, native plantings and low impact stormwater facilities, and extra-wide-right-of-way buffers. Several old rural cross-sections remain, such as Old Paris Pike and Spurr, Mason Headley, Armstrong Mill, and Mt. Tabor Roads.

Over the years, many of Lexington's state-maintained boulevards have lost their grassed medians due to maintenance budgets and demands for left turn lanes. Medians with grass, trees, or other plants provide benefits over asphalt or concrete medians, which include:

- ❖ Aesthetic (Richmond Road versus Versailles Road)
- ❖ Abatements to environmental issues, such as better stormwater absorption, improved air and water quality, and shaded pavement
- ❖ A break in the wide expanse of pavement, which gives the perception of a narrower street that helps to slow traffic
- ❖ Refuge for pedestrians to safely cross streets

Single-Loaded Streets

Single-loaded streets, where development is on only one side of the street, contribute to a desirable community in numerous ways. At the edge of the Urban Service Area, single-loaded streets provide the opportunity for connection to new neighborhoods should the USA boundary be expanded. Likewise, single-loaded streets around public parks and neighborhood centers, particularly village centers with a mix

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of uses, provide greater access to the public space and contribute to open space for high density development, such as the housing around Kirklevington Park. Single-loaded streets around parks and neighborhood centers have been developed for decades and are among the most desirable neighborhoods in Lexington, including Gratz Park and Bell Court. Other Lexington examples include Duncan, Woodland, and Castlewood Parks and portions of Veterans Park.

Single-loaded streets at the urban edge provide a hard buffer between incompatible uses (residential adjacent to agricultural) and enable the possibility of a greenbelt buffer with trails. The greenbelt could be a marketing tool for estate lots, much like the lots on Lexington's reservoirs.

Within developments, single-loaded streets are a tool to protect conservation greenways. Public use is constrained and maintenance and enforcement issues are exacerbated when the conservation greenway is minimally accessible. Two good examples of housing development on single-loaded streets around conservation greenways are Edgebrook Drive in the Squire Oak neighborhood and Willman Way near Hays Boulevard. Besides conservation benefits, these naturally treed greenways provide passive recreation opportunities for their neighborhoods and offer easy access for maintenance.

Schools

Fayette County Public Schools has 350 acres of greenspace on its campuses. Private schools have an additional 60 acres. FCPS has adopted a [sustainability plan](#), which includes creating indoor and outdoor green and healthy spaces as one of four goals. Objectives

within that goal include promoting and supporting the design and implementation of water mitigation tools such as rain gardens, green roofs, rain barrels, and stream restoration; promoting responsible planting of campus trees; and developing and promoting a school garden initiative. FCPS has two employees who work on sustainability issues. Recycling is done at most schools and FCPS is participating in local food initiatives.

There are numerous outdoor classrooms and outdoor learning labs, in addition to 37 schools that have or are planning a school vegetable, native plant, or rain garden. Interest is high, and local business partners, such as Lowe's, are providing support. Three of the five high schools have active outdoor clubs (hiking, fishing and archery) in addition to their green teams that mostly focus on energy and solid waste. Forty-two schools (with two more planned) participate in the [Kentucky Green and Healthy Schools Program](#), which allows outdoor project initiatives.

With Division of Water Quality stream restoration grants, Clays Mill Elementary students worked on Springs Branch and Mill Creek worked on its namesake. The completed stream restoration project at Mill Creek Elementary has become an outdoor classroom. LFUCG funded over \$1 million in grants between 2010 and 2012 to FCPS, private schools, and universities to improve water quality by constructing wetlands, building rain gardens, creating native plant gardens, mitigating stormwater runoff, cleaning litter, and developing curriculum. In particular, stream restoration grants were awarded for projects on Springs Branch at Clays Mill Elementary and the stream next to the Community Montessori School on Crestwood Drive near Southland.

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Traffic congestion around schools is a serious issue. There are 18,000 students, representing two-thirds of those eligible, who ride the bus. Most others are delivered by cars, which contribute to congestion issues around schools. Trails encourage walking and biking to school and can improve safety by reducing vehicular conflicts. Trails have been built at Liberty and Veterans Elementary Schools to link them to adjoining neighborhoods.

College Campuses

Higher education is an important component of a desirable community. UK and Transylvania have been integral to the composition of Lexington's landscape since their founding. The Universities of Kentucky, Transylvania, and Sullivan have nearly 230 acres of combined greenspace on their campuses, not including recreation areas.

UK is currently updating its campus [Master Plan](#). A survey from November 2012 indicated that students ranked the need for more outdoor recreation fourth out of 12 amenities listed. Faculty commented on the need to improve outdoor spaces, and consider the Arboretum as an asset. The new plan will look to improve stormwater management, campus character, and cohesion with enhanced outdoor formal spaces and gathering spaces. An assessment of existing open space extended off campus to identify opportunities for trail connections.

Cultural and Historic Resources

The 1994 Greenspace Plan describes greenspace as the essential characteristic that gives the Bluegrass its identity and quality of life.

Lexington's urban and suburban residents feel a close connection and appreciation for the farming culture.

Rural cultural resources recognized in the Greenspace Plan include farms, rural roads, stone fences, rural settlements, prime soil, stream, and natural areas. The Greenspace Plan identified Five Focus Areas that are considered to be exemplary examples of the Bluegrass landscape type. **For more information about Focus Areas, please see Chapter 7.**

There are 125 properties on the National Register of Historic Places, including houses, distilleries, warehouses, racetracks, schools, cemeteries, and churches. Protecting a landscape is a challenge because of its vast scale across many properties. Ordinarily, historic preservation is accomplished one site or district at a time. Existing protection mechanisms include:

- ❖ Over 30 National Register Districts, of which seven are in the rural area. These districts include over 5,500 significant properties in the urban areas and over 11,880 acres of significant farm land and their structures.

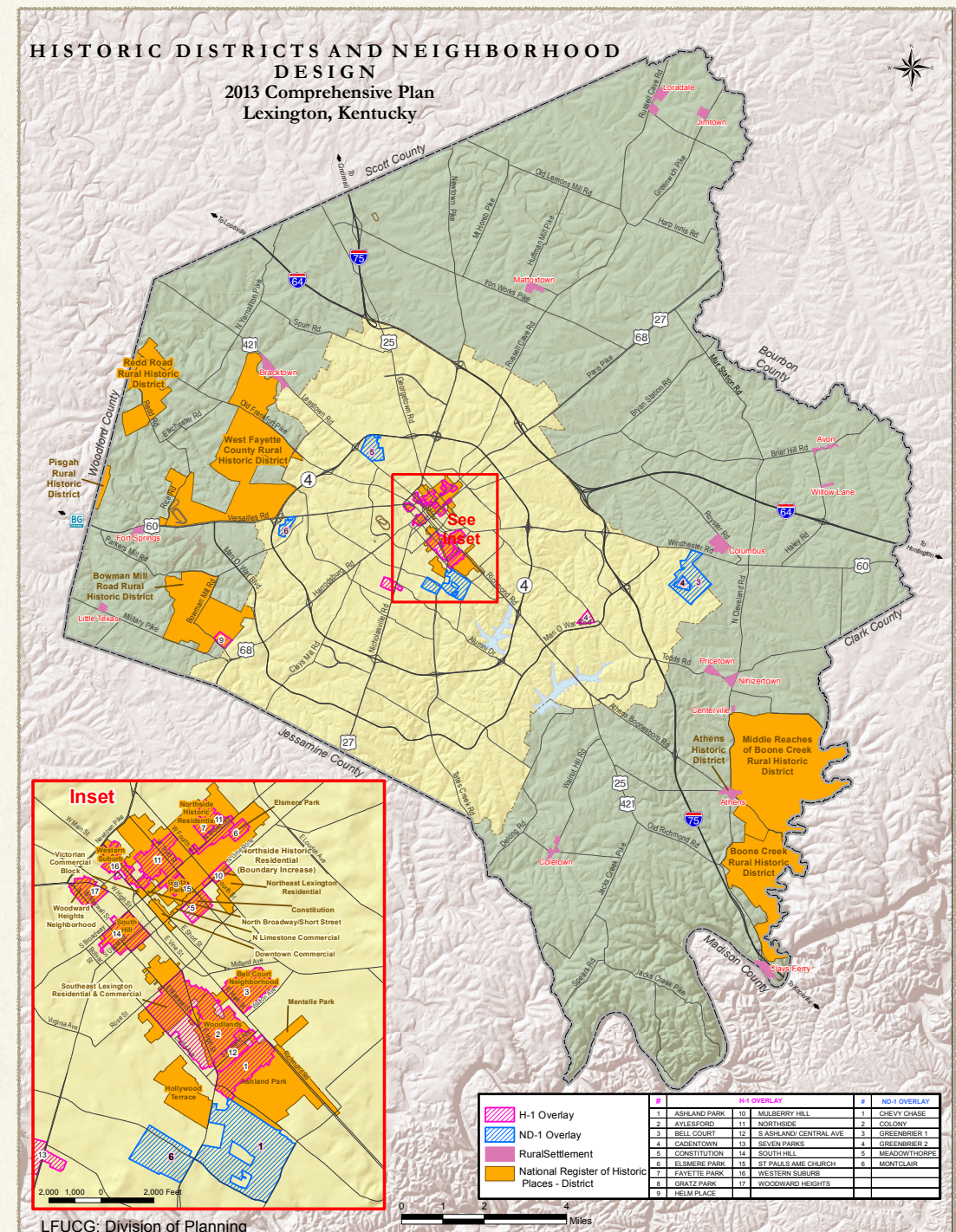
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- ❖ 15 local historic districts (H-1) and two Local Landmarks in Fayette County for a total of over 2,200 properties. In the rural area, Helm Place has an H-1 overlay 15 local historic districts (H-1) and two Local Landmarks in Fayette County for a total of over 2,200 properties. In the rural area, Helm Place has an H-1 overlay
- ❖ Five areas with a Neighborhood Design Character Overlay, which is intended to regulate the visual character of a neighborhood within the general context of its architectural styles, aesthetic, or cultural significant. The [Study of Small Rural Settlements](#) (PDF link) recommended the overlay as a protection tool for rural settlements.
- ❖ **Downtown Design Excellence** (pending) will provide design standards for the Downtown area.

Recommendations for new policies and strategies

- ❖ Update the Greenway Master Plan to reassess proposed trail alignments and regional connections; identify the downtown trail hub
- ❖ Adopt regulations to create and protect green streets
- ❖ Determine a sustainable funding source for greenway trails, park projects, and maintenance
- ❖ Create a model to assess green infrastructure benefits and impacts from change
- ❖ Update the Greenspace Survey to ensure community values are known
- ❖ Customize parks to respond to adapting trends, demographics, and flexible uses
- ❖ Actively seek partnerships and formal agreements to fun green programs

Map 6.2 Historic Districts and Neighborhood Design



Chapter 7

MAINTAINING A BALANCE BETWEEN PLANNING FOR URBAN USES AND SAFEGUARDING RURAL LAND

How can Lexington have urban growth and urban containment?

Why is Lexington's rural land worth safeguarding?

What tools support an agricultural economy and way of life?



MAINTAINING A BALANCE BETWEEN PLANNING FOR URBAN USES AND SAFEGUARDING RURAL LAND

The Bluegrass Identity

Urban development and rural preservation are two sides of the same coin. Urban infill and redevelopment strategies that accommodate growth responsibly, preserve vibrant neighborhoods, and encourage job creation in turn provide safeguards to rural land. Likewise, rural strategies that maintain a strong agricultural base, protect the land, and conserve natural areas ensure that Lexington keeps and grows its identity. Urban development and preserved rural lands can be balanced because they are mutually beneficial and reciprocal.

Rural land preservation addresses a number of important issues. Foremost, farmers may be assured through a variety of planning tools that agriculture will continue to be a significant component of Fayette County's economy. Incentives on both sides of the rural/urban line encourage creative answers to questions about growth and preservation. By offering incentives to upgrade and maintain farming operations through the Purchase of Development Rights program, the community continues to recognize the consequences of a strong agricultural economy.

Moreover, urban infill and redevelopment incentives, such as mixed-use developments, increased lot coverage, adaptive reuse, and progressive parking solutions encourage developers to maximize urban land for housing and jobs.

Recent community plans and studies, including the 2012 [Empower Lexington](#) and the 2009 [Destination 2040](#), show that Lexington's citizens view the Bluegrass landscape as the defining feature that makes Lexington unique and forms the foundation for a high quality

of life. The distinct rural greenbelt to the west, north, and east of town personifies the essential characteristics of Lexington's Bluegrass identity.

How does a well-defined urban and rural form shape what is Lexington?

- ❖ Creates an iconic sense of place
- ❖ Minimizes conflicts between urban and rural uses
- ❖ Ensures there is sufficient rural land for a thriving agricultural economy

What does the 2013 Comprehensive Plan recommend?

- ❖ Maintain the USA boundary
- ❖ Fund the Purchase of Development Rights program
- ❖ Pursue incentives to encourage compact urban growth

Urban Service Area

There are 182,761 acres in Fayette County. Thirty percent of the land (54,630 acres) is in the Urban Service Area, with 70 percent (128,131 acres) in the rural area. The Urban Service Area boundary manages urban growth by containing intense development, such as shopping and job centers and residential subdivision, distinctly separate from farmland. When introduced in 1958, the urban area was 22 percent of the land in Fayette County. Over its decades-long history, the USA boundary has been expanded and contracted, with the last major change approved by the planning commission in 1996 with the addition of over 5,400 acres.

MAINTAINING A BALANCE BETWEEN PLANNING FOR URBAN USES AND SAFEGUARDING RURAL LAND

Developing vacant and underperforming land in the Urban Service Area to accommodate Lexington's growth is a key component of safeguarding rural land. Considerable research shows that urban containment policies lead to successful efforts to develop bypassed opportunities in the urban area. Maintaining a current inventory of vacant land is a tool that will help direct resources toward land development in the Urban Service Area and inform policy questions related to any expansion of the USA boundary.

For the *2013 Comprehensive Plan*, both the Urban County Council and Planning Commission expressed their continued support for the Urban Service Area boundary by stating in the Goals and Objectives that the current boundaries of the Urban Service Area and Rural Activity Centers would remain unchanged.

Infill: A Strategic Component of Growth

How does infill help neighborhoods?

- ❖ Fills in empty lots
- ❖ Puts unused buildings to good use
- ❖ Creates new uses and opportunities

What is Infill?

Infill encompasses a number of development alternatives that provide opportunities for Lexington to grow its population and its economy within the existing Urban Service Area boundary. *Infill* includes the following:

What does the 2013 Comprehensive Plan recommend?

- ❖ Consider infill opportunities throughout the Urban Service Area, not just downtown
- ❖ Ensure that infill is sensitive to the character of existing neighborhoods, especially the citizens
- ❖ Seek neighborhood input early in infill projects
- ❖ Be creative and innovative with infill proposals

Infill - The new development of vacant, abandoned or underutilized land within a previously developed area (generally an urban setting) of the community, where infrastructure is already in place, and includes the construction of a new building on vacant ground in a developed area (*2001 Residential I/R Design Standards*). It usually involves small-scale development of scattered vacant land, but can encompass the assemblage and development of larger tracts as well.

Redevelopment - The revision or replacement of existing buildings in previously developed areas, which may include the demolition of structures, construction of new structures, or the substantial renovation of existing structures that may change the form or function of the property. It generally involves the expansion, reuse, or adaptive reuse of existing structures (*2001 Residential I/R Design Standards*)

Adaptive Reuse - The process by which structurally sound older buildings are rehabilitated or developed for economically viable new uses and the building or site is used for a purpose other than for which it was built. Such buildings may be historically important, architecturally distinctive, or simply underutilized structures. Adapting

MAINTAINING A BALANCE BETWEEN PLANNING FOR URBAN USES AND SAFEGUARDING RURAL LAND

old buildings and sites as part of an infill and redevelopment projects has enormous environmental, social, and economic benefits. Both Federal and state tax credits are available as incentives to adaptive reuse and rehabilitation.

Context-Sensitive Design - A project is considered context-sensitive when its physical design, including the placement of buildings and design, including the placement of buildings and design of open spaces, maintains connectivity to the scale, density, and exterior architectural features that reflect, relate to, or are in proportion to the surrounding neighborhood. This approach allows the development project to blend with the adjacent uses so it becomes part of and is an enhancement to the surrounding uses, which makes it more visually appealing and livable and increases its physical and economic feasibility.

Mixed-Use Projects - Mixed-Use Development in a single structure or series of structures (mix of uses) should promote residential infill and include basic neighborhood services that enhance the livability of the residents of both the development and the neighborhood area.

There are three types of mixed-use projects:

- ❖ **Neighborhood Mixed-Use** - small development concentrated along streets capable of supporting a mix of uses.
- ❖ **Neighborhood Corridor Mixed-Use** - generally a medium sized infill development typically extending one or more blocks along major roads
- ❖ **Multi-Neighborhood Corridor Mixed-Use** - larger tracts that may include multi-neighborhood businesses along arterial roads

An infill or redevelopment project is successful when the location is well thought out and the design includes existing infrastructure, public uses, and multi-modal transportation. It should be compatible with the existing built environment, including design, scale, proportion, and the context of the area of development. The *Residential Infill & Redevelopment Design Standards* document states, “...infill is not a single project type; what it is, in fact are projects with differing objectives and a range of building types and functions.” Therefore, all vacant and underutilized properties in the Urban Service Area shall be eligible for infill should any proposed new development, adaptive reuse, or redevelopment be substantially supported by the themes and goals of the *2013 Comprehensive Plan*.

Strategy and Approach

The overall strategy of infill and redevelopment is the improvement, reinvigoration, and development of quality neighborhoods that create compact development, livable neighborhoods, and viable neighborhood commercial centers, along with public services and spaces that support the efficient use of land. To accommodate population, infill should:

- ❖ Stimulate economic investment in established communities
- ❖ Encourage pedestrian scaled and multi-modal transportation
- ❖ Allow for flexibility in housing types, densities and configuration while encouraging quality and variety
- ❖ Encourage affordability in housing for all citizens
- ❖ Ensure the compatibility of new construction in a context-sensitive manner
- ❖ Provide a mix of housing types, densities, and land uses that allow for a diversity of citizens

MAINTAINING A BALANCE BETWEEN PLANNING FOR URBAN USES AND SAFEGUARDING RURAL LAND

- ❖ Enhance community vitality
- ❖ Give developers more options to make development more financially feasible

Steering Committee

Infill policy has been guided and informed by the [Infill and Redevelopment Steering Committee](#). The Committee was formed in 2000 with membership from elected and appointed officials, development and neighborhood interests, and LFUCG staff. Its mission is to recognize and improve and effective, efficient, and rational process that allows the I/R program to address challenges. Over the years, the I/R Steering Committee has formed task forces to pursue targeted issues and has developed numerous revisions to the Zoning Ordinance. Their work is ongoing.

The [2009 Housing Market Study](#) says there is a demand and growing preference for high density housing, including attached townhouses and condominiums, with a strong indication that these units will be located in dense, mixed-use, walkable neighborhoods. Yet the Housing Market Study also indicates a preference for traditional suburban-style development. Therefore, a densification objective should focus on neighborhood design, including average densities and lot sizes, while being responsive to market demands.

What is the status of the Infill Strategy?

Based on the work of the Infill and Redevelopment Steering Committee, this plan establishes and reinforces the premise that all land within the Urban Service Area should be considered for infill and redevelopment. Additionally, the Capacity Assurance Program, a

product of compliance with the Environmental Protection Agency's requirement that Lexington significantly improve the quality of water that is returned to the streams, will greatly influence how, where, and when infill and redevelopment projects occur.

The majority of the recommendations from the I/R Steering Committee's 2008 efforts have been accomplished. This represents a major collaborative effort on the part of the community. The Residential Infill & Redevelopment Study of 2001 recommended five overall strategies to improve development in the infill area, and these five recommendations are the foundation of our current I/R activities:

- ❖ **Regulatory Changes** - This I/R strategy acknowledges that in order to encourage high quality redevelopment and protect the character of existing neighborhoods, regulatory changes to the Zoning Ordinance must be reviewed on a regular basis, to ensure that the balance is being properly struck between these two seemingly conflicting objectives. Since 2001, the Division of Planning has led the Planning Commission and Council through three major Zoning Ordinance overhauls in order to further our goal of a compact and contiguous, well-built environment.
- ❖ **Redevelopment Incentives** - This I/R strategy encourages regulatory, administrative, and financial incentives to encourage appropriate infill and redevelopment. Several regulatory and administrative incentives have been approved. The Division of Planning keeps a list of [all known financial programs](#) available to the public on its website. Opportunities for new financial incentives, both from the local government and other private and public institutions, should continue to be explored.

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- ❖ **Education** - The goal is to have a long-term systematic public education program to promote compatible infill with both neighborhoods and developers. Building awareness of the regulations and how to use them is a vital strategy for a successful I/R program. Although there have been many opportunities to share knowledge about successful projects, both locally and from other communities, there has not been a long-term public education program established as recommended.
- ❖ **Facilitation** - What is unknown as the beginning of an I/R project will often add time and costs, making the project more difficult than a vacant greenfield project. The facilitation of infill projects through the myriad of governmental regulations is a positive step to encourage appropriate infill and redevelopment. In 2007, the Urban County Council created the position of Infill and Redevelopment Facilitator in order to fulfill these functions. Since that time, several I/R projects have received special attention as a result of the facilitator. Facilitation of compatible projects should continue as a key strategy to promote I/R.
- ❖ **Neighborhood Character (ND-1)** - The primary tool for individual neighborhoods to protect their specific identities and character is either H-1 or ND-1 zoning. Since its creation, the Neighborhood Design Character (ND-1) overlay zone has been strengthened and made more user-friendly. Because ND-1 regulations are tailored to each individual neighborhood's character, much effort is placed on the study and review of each application.

Next Steps

In some instances, projects are limited to the densities of the earlier defined land use categories, which have not been analyzed or altered

to project future infill and redevelopment growth in the urban area. This may inhibit the density goals and aspirations of the infill policies, as densification is the driving force that enables successful infill and mixed-use development, and supports the key elements of successful and healthy neighborhoods. Land use category densities should be reevaluated in light of growth population projections and the ability to accommodate all growth in the Urban Service Area. It will also be necessary to make corresponding changes to the Zoning Ordinance and other regulations, while balancing neighborhood considerations against mixed-use or redevelopment of commercial areas.

Infill and redevelopment can have many positive effects on neighborhoods and the community as a whole, including the reduction of pressure to convert rural land to urban uses. It can also create neighborhoods that are more vibrant and stimulate both private and public investment. Further, I/R promotes environmental sustainability by reducing carbon emissions. Yet challenges exist for successful developments in both existing urban areas and in undeveloped or underutilized properties. While each project will bring its own unique challenges, some will be shared by all I/R projects, as can the strategies to overcome or mitigate them.

Strategies

- ❖ Prepare and update an inventory of vacant land
- ❖ Fund the land bank program
- ❖ Allow accessory dwelling units for increased density and affordable housing in appropriate locations
- ❖ Develop a comprehensive education program for neighborhoods and property owners near infill sites

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- ❖ Include neighborhood groups early in projects
- ❖ Allow mixed-use or higher density to achieve critical mass of residential to attract business for daily needs
- ❖ Create city-wide environmental standards for development
- ❖ Create design guidelines
- ❖ Review land use policies, the Zoning Ordinance, and Code of Ordinances to address barriers to I/R goals

Infill and Neighborhoods

The design of each infill site is dependent on its location, size, context, and the existing or new character of the project. All projects, however, have commonalities, the first of which is to build upon the basic concepts of infill which include the character and context of surrounding neighborhoods, or which sets the standard for new character. The history of existing neighborhoods should be considered and possibly celebrated as new development occurs. This would help commemorate the people and households who constituted the neighborhood and the buildings and layout that gave the neighborhood its form.

Projects should take into consideration multi-modal transportation if located on large tracts of vacant land or in established areas and should respect the pedestrian experience. Open space, both private and common, will help establish a successful infill project.

In order for infill and redevelopment to be successful, community leaders who advocate compact urban growth must provide neighborhoods with a comprehensive education program to build understanding of the need for and outcomes of this type of

development. While the government is a partner, the education and facilitation of neighborhoods must be shared by credible community organizations and leaders from the private sector.

Existing traditional urban and older suburban neighborhoods are designed for multi-modal transportation and provide a mix of uses for the daily needs of the residents, including schools, libraries, retail, and personal services. Infill and redevelopment should help neighborhoods achieve a mix of uses that support and enhance a citizen's daily life. It is important that development and redevelopment recognize the home as the basic element of a neighborhood, the context of the built environment, including architectural character along with a desired mix of uses, should be considered. The use of the *Residential Infill and Redevelopment Design Standards* should be considered to be applicable to the entire Urban Service Area, and new standards should be created for the development of large undeveloped parcels.

Neighborhood concerns about infill, development, and redevelopment take many forms but are generally associated with the protection of the neighborhood's unique characteristics, protection of property values, preservation of the community character, perceived appropriate densities and effects of affordable housing. Education for the neighborhood in which the project will result in better understanding and better projects. Context-sensitive design can help overcome neighborhood concerns. This type of design does not require the re-creation of existing buildings or architectural design, but respects the scale, massing and size of surrounding buildings. Architectural features such as porches and rooflines should be shown in scale with the neighborhood.

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Neighborhood perceptions of infill can affect the quality and density of development. Other factors, such as land acquisition and the cost of upgrading or installing new utilities are often barriers, as can be the cost of renovating or rehabilitating existing buildings for adaptive reuse.

Other barriers include the exclusion of certain housing types, which can include mixed-use buildings (vertical), accessory dwelling units, and multi-family housing. Finally, there are fewer constraints in developing large vacant parcels than smaller infill parcels, including land and infrastructure costs, regulatory requirements and land assemblage. There is generally less neighborhood opposition as well.

Scales of Infill, Development and Redevelopment

Single Parcel - Single parcel projects include infill or redevelopment of a vacant or underutilized property that fills in the gaps in an existing neighborhood. An example of this type of infill would be single-family housing. For larger lots this type of infill might include duplexes, townhouses or condominiums that may or may not require consolidation of parcels. Single parcel infill development may include parcels from under one acre to larger parcels up to about two acres.

It is important that single parcels of infill respect the context and character of the neighborhood, while adding to the densification of the area. Small scale/parcel infill can be an avenue for affordable housing options and can take advantage of existing public services such as schools, open space, and other infrastructure (public utilities).

Small Parcel - Small infill, development or redevelopment parcels are generally between 2 and 5 acres. Parcels of this size should develop at or above the average density of the area in which they are built. An example of this type of development might include the addition of small-lot single-family houses, duplexes or other attached housing including townhouses and condominiums. Adaptive reuse of existing buildings on larger parcels is encouraged and should be considered as an asset to the development.

Mid-size development - Mid-size development or redevelopment on parcels of 5 to 10 acres are opportunities for mixed-use development and may create a new character in an area, however, if these developments are surrounded by an established neighborhood, it is important for the project to relate to the existing context and character. This type of development should include varied housing choices, connect to the existing neighborhood and contain both private and common open space. Housing types may include multi-family residential, small-lot residential, duplex or other small-attached housing types, townhouses and condominiums. This type of development is an opportunity to for small, mixed-use development, either horizontal or vertical in design. Existing residential or commercial buildings that contribute to the character of the area should be considered as an opportunity for adaptive reuse and be incorporated into the overall design of the development.

Over 10 acres -There are no clear definitions or categories of infill or development above 10 acres or on large vacant tracts. Standards for

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large lot infill should be established as a component of the New Development Character recommendations.

Recommendations for new policies and strategies

- ❖ Improve regulations to enhance infill opportunities.
- ❖ Create design standards to help maintain neighborhood character.
- ❖ Create a marketing program that promotes infill and explains its advantages.
- ❖ Prepare and update an inventory of vacant land.
- ❖ Recognize a neighborhood's past with prominent and permanent historical markers.

Rural Area

Over the decades, various plans and studies have called for the preservation, conservation, restoration, or enhancement of the farms, scenic viewsheds, rural settlements, and natural areas that compose the landscape of the rural area. These plans include:

- ❖ [1994 Greenspace Plan](#)
- ❖ [1999 Rural Service Area Land Management Plan](#)
- ❖ [2002 Greenway Master Plan](#)

Each plan is a significant resource for the rural area. To ensure their currency, these plans should be evaluated to determine whether they should be updated. Additional studies of the rural area include:

- ❖ [2007 Study of Small Rural Settlements](#)
- ❖ [2011 Rural Corridor Protection Project Report](#)

- ❖ [2013 Influence of the Agriculture cluster on the Fayette County Economy](#)
- ❖ [2013 UK Equine Study](#)

More recently, the 2012 [Empower Lexington Plan](#) described the role of land and food systems for the reduction of energy usage.

Numerous economic, natural, historic, and cultural resources in the rural area are under various degrees of protection. From the Urban Service Area boundary through ongoing review of permitted uses, the citizens of Lexington continue to support efforts to preserve rural land.

Rural Land Use

There are 128,131 acres in the rural area, of which 88 percent is classified as Core Agricultural and Rural Land, according to the 1999 [Rural Land Management Plan](#). Other uses include Rural Settlements, Rural Activity Centers, Natural Areas, and public parks, among others.

An updated inventory should be conducted to ensure all land in the rural area is accurately counted and classified. The inventory should include location and size of farms and horse farms along with current zoning, land use, and ownership patterns that may affect future agricultural use.

The rural soils and farmland are the basis for the agricultural industry's factory floor. From the iconic horse farms to the production cattle and crop farms, agriculture is the preeminent use of Fayette County's rural land. It is, however, not the only use.

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Lexington's three largest public parks are in the rural area, along with the first trail designed to be a destination for residents and visitors. There are two Interstates and countless rural roads, an airport and three job centers, and three prisons. There are rural subdivisions and strings of 10-acre lots, and many uses in the rural area that, while important to Lexington, are not directly related to the agricultural economy.

Core Agricultural Rural Land

The core agricultural land is characterized by the gently rolling hills, tree-lined roads, historic houses, and plank and rock fences. The area is associated with outstanding soils that support general and equine farming, which is defined as lands comprised of at least 50 percent prime soils or 75 percent prime and soils of statewide significance. Because of the investments in equine complexes, land values are higher than those in surrounding rural counties predominated by general agriculture.

There are two major destinations in the core agricultural land, both of which are equine-related: the Kentucky Horse Park and Keeneland Race Course. Fasig-Tipton (equine sales and special events) and The Kentucky Training Center are associated with the agricultural cluster. Other non-farm uses in the core agricultural area that are related to agriculture include the new public high school, Locust Trace, and Hisle Park. Additional destinations include an elementary school, several public parks, golf courses, a regional trail, and private clubs. Keeneland is a National Historic Landmark and Helm Place is a local landmark and historic house museum. Additional museums in core

agricultural land include the American Saddle Horse Museum, the International Museum of the Horse; the Aviation Museum of Kentucky, and the Headley - Whitney Museum.

Natural Area

Located in the extreme southeastern portion of Fayette County, the Natural Area is characterized by lands associated with the Kentucky River, its tributaries, and the Palisades. For 13 miles, the Kentucky River creates the county border. The streams, forests, cliffs, and gorges in the area possess unique natural resources in Fayette County.

There are two protected preserves in the Natural Area: Floracliff and Raven Run. Both are nature sanctuaries that promote biodiversity and rare species conservation, ecological health, and early identification of potential threats. They promote public education of the natural and cultural history of the Inner Bluegrass region.

The 287-acre [Floracliff](#) Nature Sanctuary was designated a Kentucky State Nature Preserve in 1995 and is further protected by a conservation and scenic easement held by the LFUCG Rural Land Management Board. Recently, the Floracliff non-profit foundation built a new nature center to expand programming, conduct research, and accommodate more visitors.

SCENIC CORRIDOR
2013 Comprehensive Plan
Lexington, Kentucky

Rural Road Protection

- Needs Most Protection
- Needs Moderate Protection
- Needs Some Protection
- Protection Not Needed

0 1 2 4 Miles

LFUCG: Division of Planning

Roads and Corridors

State-designated scenic byways have some protection in that the state must consider the scenic properties when designing their road projects. The Lexington-Frankfort Scenic Corridor, Inc. has begun the process to designate Old Frankfort Pike as a National Scenic Byway.

- ❖ Evaluate the effectiveness of current protective measures and identify needed changes; and
- ❖ Determine the measures necessary to protect the scenic quality of Fayette County's Rural Corridors.

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The limestone fences along the rural corridors are readily identifiable cultural icons that are unique to Central Kentucky. Made of local natural materials, the fences demonstrate sustainable farming practices from the 1800s. The resource, however, is threatened by vehicular damage, neglect, theft, and the passage of time. An inventory conducted in 1990 found 247 limestone fences with a total length of 38.7 miles. The inventory should be updated. An ordinance adopted in 1994 protects the walls that are located in the public right-of-way from demolition.

Safety on Fayette County's rural roads is a critical issue for all who use the roads. Wherever people live and work, there will be pedestrians and bicyclists, even in rural areas, whether they are walking and biking for recreation, fitness, or to access their place of employment. Bicycling is a popular recreational activity in rural Fayette County and the Bluegrass Region, which is positive for community health and tourism efforts and fosters an awareness and appreciation of the landscape. *Share the Road* signage has been installed along roads frequented by cyclists to help warn drivers of the presence of bicyclists on our rural roadways. A regional system of signed bicycle routes would provide a means of wayfinding for local and touring cyclists while raising awareness of multiple users of the roads. In addition, paved shoulders are added to major rural roadways as they are improved to provide additional safety for motorists and cyclists. Opportunities for shared use trails along major roadway corridors that connect to adjacent communities should be further explored when roadways are improved and when coordinating future community plans with adjoining counties.

Trails

The Rural Service Area Land Management Plan and the Greenway Master Plan call for the development of a rural greenway system of on-road bicycle routes, shared use trails, and water trails. Two seasonal streams and the Kentucky River are popular with boaters as well.

The **Legacy Trail** is the first greenway trail built in the rural area and crosses the University of Kentucky's Maine Chance and Coldstream Farms and Spindletop Research Campus. Working with the UK College of Architecture, the trail was designed to showcase the farms while providing security for agricultural operations and avoiding environmentally sensitive areas. Easements for the rural trail were obtained from the Commonwealth of Kentucky, Courtyard by Marriot, LFUCG, the University of Kentucky, Lexmark International, Rosenstein Development, and the YMCA. The design also included a land swap between UK and Vulcan Materials.

The Greenway Master Plan shows conceptual alignments for shared use trails along the North Elkhorn and Cane Run Creeks, as well as abandoned and active rail lines. The feasibility of these alignments needs further study while recognizing the need to provide access within the proximity to the proposed trails. The Greenway Master Plan recommended equestrian trails, but did not suggest particular alignments.

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Focus Areas

The 1994 Greenspace Plan designated five Focus Areas that exemplify the rural Bluegrass identity and represent the greatest concentration of valuable resources. They include:

- * Old Frankfort Pike
- * North Elkhorn Creek
- * South Elkhorn Creek
- * Boone Creek
- * Kentucky River Palisades

The 1994 Greenspace Plan recommended that the cultural and scenic viewsheds, as well as the natural assets, along these corridors should be protected. The Plan further recommended that the areas be studied for public access and use by a combination of tours along roadways and acquisition in limited locations.

Stream Corridors

According to the Greenway Master Plan, all stream corridors are considered conservation greenways. In the rural area, they are identified by a 50-foot buffer representing the riparian no-mow zone. Rural streams are conserved through property owners' Water Quality Plans.

Rural Activity Centers

The *1980 Comprehensive Plan*, as well as subsequent Plans, identified four Rural Activity Centers that were existing employment centers located outside the Urban Service Area. While not eligible for major public investments for urban services, the Rural Activity Center can

receive public facilities and services to accommodate the planned amount of non-residential land uses.

The 1999 Rural Land Management Plan states that the boundaries of the Rural Activity Centers should not change to ensure the protection of rural farm uses, to prevent inappropriate growth pressures on farmland, and to eliminate premature and costly noncontiguous growth. Modification to the boundaries of any of the Rural Activity Centers should only be considered after extensive studies regarding land needs, traffic, adequacy of sewers, and other pertinent factors. The *2013 Comprehensive Plan* Goals and Objectives state that the RAC boundaries should not be expanded.

Blue Sky - Located at the intersection of Athens-Boonesboro Road and I-75, this area, at **448 acres**, is used for warehousing, light industry and Interstate commercial development. In response to the EPA Consent Decree, the Urban County Government is developing a future infrastructure project to eliminate the Blue Sky sewage treatment plant by January 2015. The project will include plans to eliminate the Boonesboro Manor sewage treatment plant. In addition, the 2013 Comprehensive Plan recommends a small area plan for Blue Sky RAC to evaluate its potential for jobs and economic development.

Avon (Blue Grass Station) - Located on Briar Hill Road and Houston-Antioch Road, this area is used for warehousing and light industry. Avon is served by a private treatment plant.

Although the current boundary of the Avon Rural Activity Center is just over **280 acres**, the commonwealth of Kentucky has purchased

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an additional adjacent **750 acres** that extends to the Bourbon County line. The *2013 Comprehensive Plan* recommends Avon RAC be evaluated for its potential for jobs and economic development.

Spindletop - Located at the intersection of Iron Works Road and Berea Road, this land, at **182 acres**, is used for offices. Effluent from the existing uses is pumped into the LFUCG sanitary sewer system.

Airport - Located at Versailles Road and Man o' War Boulevard, this development is designated for Other Public Uses. In addition to the terminal, there are warehousing and office uses to support the facilities at the airport.

The existing Airport RAC boundary includes 718 acres. The airport, however, has acquired an additional 580 acres for future expansion. Blue Grass Airport is presently updating its Master Plan.

Rural Settlements

Scattered throughout the Rural Service Area are historic communities settled after the Civil War by freed African-Americans. Three of the original eighteen rural communities, Bracktown, Cadentown, and Jonestown have been absorbed into the Urban Service Area.

The 2007 Study of Small Rural Settlements gathered data on the remaining 15 settlements to document their character, history, and eligibility for the National Register of Historic Places. The Study evaluated existing plans, policies, and mechanisms for protection and made recommendations for each community.

Some of the recommendations have been implemented, such as adjustments of the boundaries of nine communities. All of the recommendations were included in the 2007 Comprehensive Plan which, in effect, implemented those that called for recognition of their significance, threats, or types of settlements, or called for their integration into the planning process. Specific action plans for other key recommendations remain to be considered. A Rural Settlement Committee of the Urban County Council was created to address issues identified in the Study.

PDR and Conservation Easements

Conservation easements provide the strongest level of rural land protection. In 2000, the Urban County Council approve an Ordinance that created the **Purchase of Development Rights program** and the Fayette County Rural Land Management Board. Fayette County's PDR program was the first Agricultural Conservation Easement program by a local government in Kentucky. The mission statement of PDR is to purchase conservation easements on 50,000 acres in the rural area to secure a critical mass of protected farmland for the general agriculture, equine and tourism industries. The RLM Board establishes administrative procedures for PDR, distributes funds for acquisition, and solicits, acquires, and holds conservation easements. Farms are ranked for consideration and points are awarded for farms that protect and manage their prime and statewide significant soils and their environmentally sensitive areas as well as greenways, rural roads, scenic viewsheds, historic areas, and natural areas. Points are awarded if the farm is in one of the five Focus Areas as identified in the Greenspace Plan.

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Since 2000, PDR has received over \$31 million in local funds, \$16 million in state funds, and \$20 million in federal match grants for the purchase of conservation easements. Additionally, over \$11 million worth of conservation easements have been donated. At present, there are 237 farms totaling more than 26,800 acres that are permanently protected by conservation easements. This includes donated easements on 39 farms and 1,732 acres.

The types of farms in the program include:

- ❖ 94 general agriculture farms
- ❖ 130 equine farms
- ❖ 13 other farms (sod, wooded, etc)

In addition to PDR easements, rural land is preserved by the following:

- ❖ The Bluegrass Conservancy: 2,534 acres
- ❖ Kentucky's Purchase of Agricultural Conservation Easements (PACE) programs: 101 acres
- ❖ Rural Land Management Board: 287 acres (Floraclyff)

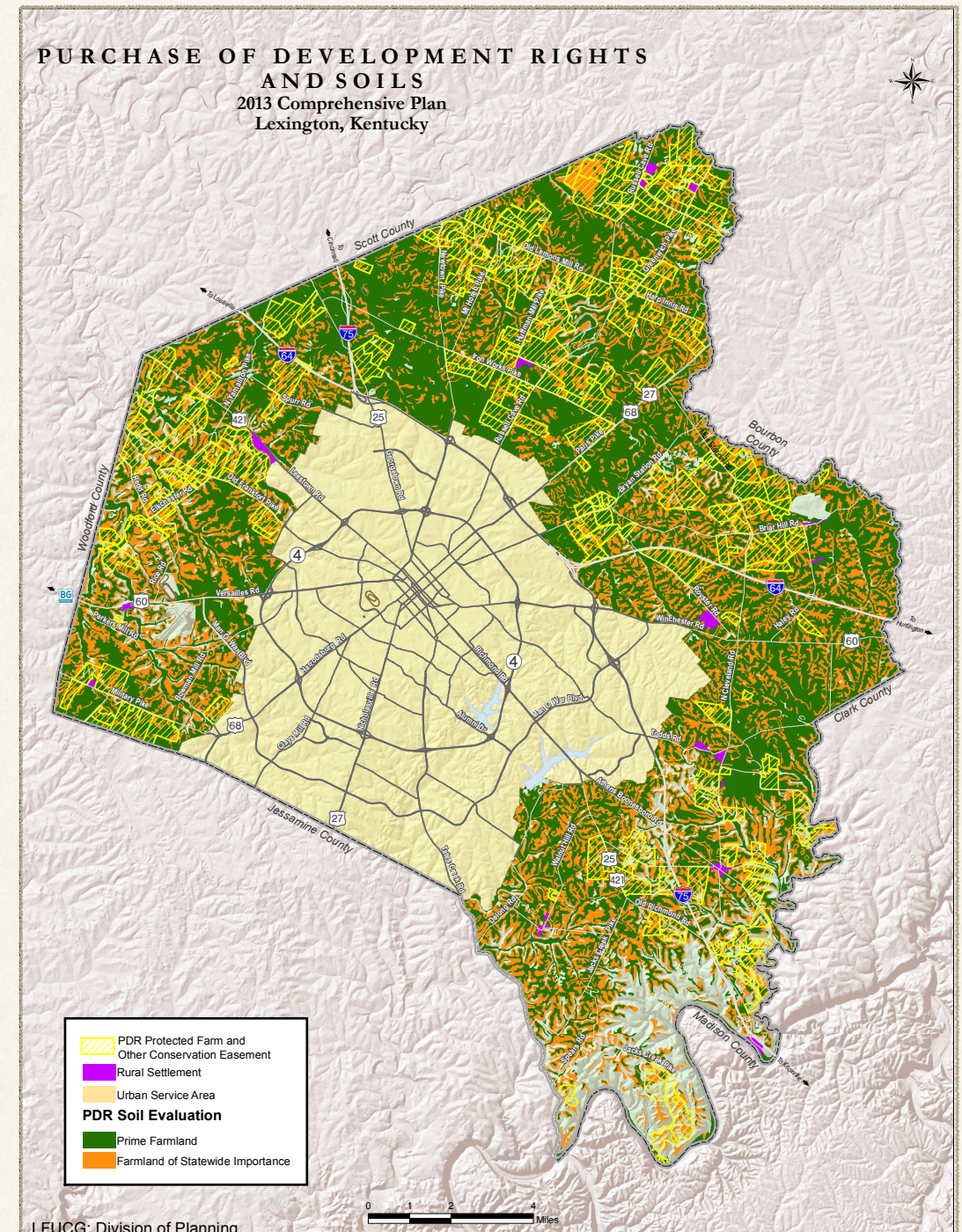
40 Acres

In 1999, the Urban County Council established a minimum lot size of 40 acres in most of the rural area to preserve viable tracts for farming. This action ended the reduction of farms to 10-acre tracts primarily for residential purposes.

Overlay Zoning

Overlay districts provide protection through additional zoning. In 1990, Helm Place on Bowman Mill Road, a home was associated with

Map 7.2 Lorem Ipsum dolor amet, consectetur



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the family of Mary Todd Lincoln, was designated a local historic landmark and subsequently zoned with the H-1 overlay to protect the historic integrity of the 58-acre site. In 1999, the Paris Pike Overlay was created as part of the road improvement project to preserve the cultural and natural features of the landscape - the scenic viewsheds - for 1,000 feet on each side of the road. LFUCG and Bourbon County have an agreement to jointly administer the preservation of the corridor through the Paris Pike Corridor Commission. The Greenway Master Plan recommends a trail along the corridor.

Rural Land Use and Zoning

Rural land uses include Core Agriculture, Rural Settlements, and Natural Areas. Ninety-eight percent of the rural area is zoned Agricultural Rural (A-R). The **intent** of the A-R zone is to preserve the rural character of the agricultural service area by promoting agriculture and related uses, and by discouraging all forms of urban development except for a limited amount of conditional uses.

National Register

There are seven districts designated as **National Register of Historic Places**, throughout the rural area that cover 11,877 acres, including Athens, Boone Creek, and Redd Road. The Register is the official federal list of the historic places in the United State worthy of preservation. It is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.

Recommendations for new policies and strategies

- ❖ Consider the findings and recommendations of the Rural Corridors Protection Project report for future policy decision and development proposals.
- ❖ Consider the findings and recommendations from the 2007 Study of Small Rural Settlements to create safeguarding mechanisms for the Rural Settlements.
- ❖ Update the rural land inventory to account for all rural uses.
- ❖ Update the limestone fence inventory.
- ❖ Conduct small area plans for Blue Sky and Avon Rural Activity Centers to evaluate their potential for jobs and economic development.
- ❖ Review the studies and adopted plans that address rural issues for possible update or amendment.
- ❖ Install *Share the Road* and other coordinated wayfinding signage along rural roads that are frequented by bicyclists.
- ❖ Develop a regional system of on-road bicycle routes, shared use trails, and water trails.